

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF TEXAS  
HOUSTON DIVISION**

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Case No. 4:22-cr-612-S

UNITED STATES OF AMERICA,

v.

EDWARD CONSTANTINESCU,  
PERRY “PJ” MATLOCK,  
JOHN RYBACZYK,  
GARY DEEL,  
STEFAN HRVATIN,  
TOM COOPERMAN,  
MITCHELL HENNESSEY, and  
DANIEL KNIGHT,

Defendants.

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**DECLARATION OF MARIA E. GARIBOTTI, PH.D.**

**JUNE 15, 2023**

**TABLE OF CONTENTS**

I.	Introduction .....	1
A.	Qualifications.....	1
B.	Background and Assignment .....	2
C.	Compensation.....	2
D.	Materials Reviewed .....	3
II.	Summary of Findings.....	3
III.	Identification of the At-Issue Trading Episodes and False Statements .....	3
IV.	Profit Calculation for At-Issue Trading Episodes .....	4
V.	Data Files for the At-Issue Trading Episodes.....	7
	Appendix A - CV .....	A-1
	Appendix B - Materials Reviewed .....	B-1
	Appendix C - Data Appendix.....	C-1
A.	Trading Data and Profit Calculation .....	C-1
B.	Communication Data.....	C-6
C.	Preparation of the Data Files.....	C-8

## I. INTRODUCTION

### A. Qualifications

1. My name is Maria Eugenia Garibotti, and I am a Vice President at Analysis Group, an economic, financial, and strategy consulting firm. I have more than ten years of experience as a professional economist, including with respect to data analysis in litigation.

2. At Analysis Group, I specialize in the application of economics and statistics to questions arising in antitrust, healthcare, and finance, among other areas. My work in healthcare and antitrust includes directing statistical analysis of pharmaceutical and medical claims data, and my work in finance includes directing data analysis of residential mortgage-backed securities, alleged collusion in financial markets, and investigations of spoofing allegations. In my antitrust work, I have evaluated market definition, market structure, competitive effects, and efficiencies in merger reviews and investigations, and have assessed the appropriateness of class certification. I have testified at trial presenting evidence of spoofing in precious metals futures markets, and as an expert witness addressing economic analysis of trade secrets.

3. Before joining Analysis Group, I was a Term Assistant Professor at Barnard College, where I taught undergraduate courses on econometrics and program evaluation, among others. As a graduate student at New York University, I received an Outstanding Teaching Award as a teaching assistant for undergraduate statistics. More recently, I served as a guest lecturer on topics in competitive strategy and antitrust at the Kellogg School of Management at Northwestern University.

4. I earned a Ph.D. in economics from New York University, and a B.S. in economics from Universidad de San Andrés in Buenos Aires, Argentina. A copy of my curriculum vitae and a list of cases in which I have provided testimony at trial or deposition is attached as **Appendix A**.

**B. Background and Assignment**

5. I have prepared this declaration at the request of the United States Department of Justice's Criminal Division Fraud Section ("DOJ"). I understand that the DOJ alleges that the Defendants in the above-cited case, as well as Francis Sabo (collectively, the "At-Issue Traders"), made false and misleading statements during their trading in specific securities during specific time periods (the "At-Issue Trading Episodes") in order to "pump" (*i.e.*, artificially inflate) the prices of those securities and subsequently "dump" (*i.e.*, sell) their shares for a profit.<sup>1</sup> There are 397 At-Issue Trading Episodes covering 127 unique securities and trading activity between January 2020 and April 2022.<sup>2</sup>

6. The DOJ has asked me to calculate the profit the At-Issue Traders realized during the At-Issue Trading Episodes. The DOJ has also asked me to prepare a file for each of the At-Issue Trading Episodes summarizing (i) the At-Issue Traders' trading activity, and (ii) certain public communications by the At-Issue Traders on Twitter and the "Atlas Trading" Discord channel that referenced the applicable security during the time period covered by the episode. I have also been asked to flag in these files specific public communications that the DOJ alleges to be false.

**C. Compensation**

7. I am being compensated at my standard hourly government rate of \$705 per hour. Through June 14, 2023, I have spent approximately 30 hours on this matter. Employees of Analysis Group, working under my direction and supervision, have assisted me in this assignment at their standard hourly government rates; I understand that through April of 2023, Analysis Group has been paid approximately \$156,000 in

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<sup>1</sup> Superseding Indictment, *United States of American v. Edward Constantinescu, et al.*, 4:22-cr-612-S, February 8, 2023 ("Superseding Indictment"), ¶ 1.

<sup>2</sup> See **Exhibit 1**.

connection with this matter, a portion of which is for work performed prior to my involvement in this matter. Neither my compensation nor that of Analysis Group is contingent on the nature of my findings or the outcome of this litigation.

#### **D. Materials Reviewed**

8. In performing the analysis for this declaration, I reviewed the documents and data listed in **Appendix B** and/or cited in this declaration and its exhibits. My work on this matter is ongoing, and I may review additional materials or conduct further analysis. I reserve the right to update my analysis.

### **II. SUMMARY OF FINDINGS**

9. Based on my review of the materials listed in **Appendix B**, I calculate that the At-Issue Traders realized \$121,474,498.91 in profit from their trading during the At-Issue Trading Episodes.

### **III. IDENTIFICATION OF THE AT-ISSUE TRADING EPISODES AND FALSE STATEMENTS**

10. I understand that the DOJ generally identified the start time for the At-Issue Trading Episodes as the date on which one or more of the At-Issue Traders first established a new position in a security through a purchase of shares.<sup>3</sup> This methodology accounts for At-Issue Traders' alleged practice of frontloading or purchasing shares of a security before posting about the security on social media.<sup>4</sup> I similarly understand that the DOJ generally identified the end date of the At-Issue

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<sup>3</sup> There are 33 At-Issue Trading Episodes in which at least one At-Issue Trader had an outstanding position in the relevant security prior to the start of the episode. I describe how I handle these instances in **Appendix C**.

<sup>4</sup> See, e.g., Superseding Indictment, ¶ 13.

Trading Episodes as the last date on which an At-Issue Trader sold shares of the security following an alleged effort to “pump” the price of the relevant security.<sup>5</sup>

11. For each At-Issue Trading Episode, I was instructed to calculate profit for every At-Issue Trader, including for those traders who are not alleged to have made a false statement during the episode. I understand that this methodology is to account for the trading activity of (i) an At-Issue Trader who is not alleged to have posted false information about a security on social media but who may have sought to “pump” the price of the security by posting other positive information about a security, and (ii) an At-Issue Trader who is alleged to have coordinated his purchase and sale of a security with one or more other At-Issue Traders but remained silent about the security on social media.<sup>6</sup>

12. I understand from the DOJ that the allegedly false statements typically are similar in nature to those identified in paragraph 13 of the Superseding Indictment. These statements are generally (i) closely related in time to an At-Issue Trader selling shares of the security referenced in the allegedly false statement, or (ii) assist in putting into context a subsequent allegedly false statement by the same At-Issue Trader. I have also reviewed the Fifth Circuit’s Pattern of Jury Instruction for “false representation.”

#### **IV. PROFIT CALCULATION FOR AT-ISSUE TRADING EPISODES**

13. The DOJ provided me with trade files from six brokerages for accounts associated with the At-Issue Traders. **Appendix C** provides a detailed description of the steps I took to combine these files and calculate the profit the At-Issue Traders

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<sup>5</sup> The At-Issue Traders typically did not hold any outstanding position in the security at the end of the episode defined in this manner. Of the 397 At-Issue Trading Episodes, there are 35 At-Issue Trading Episodes in which at least one At-Issue Trader had an outstanding position in the relevant security at the end of the episode. I describe how I handle these instances in **Appendix C**.

<sup>6</sup> See, e.g., Matlock Discord DM 420705863188086784 (In three messages sent on 10/21/2020, Defendant Constantin (ZackMorris#0001) told Defendant Matlock (PJ Matlock#0001): “ur better off loading and staying quiet[;] and just sell when other[s] pump[;] so u dont look dumb”. In two messages sent on March 16, 2021, Defendant Constantin (ZackMorris#0001) told Defendant Matlock (PJ Matlock #0001) “just wait for that really nice dip on the volume plays[;] “because others will pump it”).

realized from their trading during the At-Issue Trading Episodes, which I summarize below.

14. The primary steps I took to construct a combined trade dataset were:
  - a. Filtering the trade files to include only fully or partially executed trades (*i.e.*, removing fully cancelled orders, reversed trades, or expired orders);
  - b. Standardizing fields across datasets, in particular converting all timestamps to U.S. Eastern Time and standardizing the names for buy and sell transactions across datasets;<sup>7</sup> and
  - c. Stacking the trade files together into a single file.

15. After combining the trade data, I assigned each trade a “roundtrip” identifier. A roundtrip is a collection of trades within a brokerage account that initiates a new long or short position in a given security and subsequently returns the account’s position in that security to zero. **Table 1** shows an example of an account that makes an initial purchase of 5 units of XYZ stock at 10:00AM, buys 5 more units at 11:00AM, sells 4 units at 11:30AM, and sells the remaining 6 units at 12:00PM. Those four trades form a single roundtrip.<sup>8</sup>

16. Within a roundtrip, I calculated profit on a first-in-first-out (“FIFO”) basis. In a FIFO profit calculation, shares are assumed to be sold in the order they were acquired, meaning that when determining the acquisition cost for a share that is sold, I use the price of the share within that account that was purchased the earliest and that has not yet been used for a sold share. This is usually explained as the account’s earliest

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<sup>7</sup> “Eastern Time” refers to the US time zone which, from the second Sunday in March to the first Sunday in November, is 4 hours behind Coordinated Universal Time (“UTC”) and which, during the remainder of the year, is 5 hours behind UTC. *See, e.g.*, National Institute of Standards and Technology, “Local Time FAQs,” March 2023, available at <https://www.nist.gov/pml/time-and-frequency-division/local-time-faqs>.

<sup>8</sup> I identified roundtrips by taking the cumulative sum of shares purchased and sold over time for a given account holder, symbol, and brokerage account (beginning from a trader’s first trade in a given symbol); every time the cumulative position returns to zero, the subsequent transaction is the start of a new roundtrip.

purchased shares being sold first.<sup>9</sup> Continuing the example in **Table 1**, at 11:00AM the account realizes a \$0.40 FIFO profit equal to the sale price of the four shares sold at 11:00AM (\$1.10) minus the purchase price of four of the shares purchased at 10:00AM (\$1.00) times the number of shares sold (four). At 12:00PM the account realizes a \$0.80 FIFO profit from the sale of six shares at 12:00PM equal to (i) the sale price of these six shares (\$1.30) minus the purchase price of the remaining share purchased at 10:00AM (\$1.00) times one share, plus (ii) the sale price of the sold shares (\$1.30) minus the purchase price of the five shares purchased at 11:30AM (\$1.20) times the remaining five shares sold.

**Table 1: Roundtrip Example with FIFO Profit Calculation**

<b>Time</b>	<b>Shares Bought</b>	<b>Cumulative Number of Shares</b>	<b>Price Per Share</b>	<b>FIFO Profit</b>
10:00AM	5	5	\$1.00	-
11:00AM	(4)	1	\$1.10	$(\$1.10 - \$1.00) \times 4 \text{ shares} = \$0.10 \times 4 \text{ shares} = \$0.40$
11:30AM	5	6	\$1.20	-
12:00PM	(6)	0	\$1.30	$(\$1.30 - \$1.00) \times 1 \text{ share} = \$0.30 \times 1 \text{ share} = \$0.30$ $+ (\$1.30 - \$1.20) \times 5 \text{ shares} = \$0.10 \times 5 \text{ shares} = \$0.50$ $= \$0.80$
<b>Total</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>\$1.20</b>

<sup>9</sup> There are 32 roundtrips with trades that contribute to the profit calculation in which an account at some point during the roundtrip has a negative (short) position. The FIFO method works the same for short positions as for long positions but in the inverse—it matches purchases against the earliest sale that has not already been covered.

17. To calculate profits for the At-Issue Trading Episodes, I first identified every roundtrip that contained at least one trade in the relevant security during the episode.<sup>10</sup> For these roundtrips, I then calculated the total FIFO profit associated with every trade that took place during the episode and summed these profits together to determine the profit each At-Issue Trader realized during the episode.<sup>11</sup> Trades from 6,883 unique roundtrips are included in the profit calculation.<sup>12</sup>

18. In total, the At-Issue Traders realized \$121,474,498.91 in profit during the At-Issue Trading Episodes. **Exhibit 1** reports these profits by trader for each of the 397 At-Issue Trading Episodes.

## **V. DATA FILES FOR THE AT-ISSUE TRADING EPISODES**

19. In addition to the profit calculation above, I have also submitted in connection with this declaration Excel files containing, for each At-Issue Trading Episode:

- a. Trades by the At-Issue Traders in the relevant security during the episode (aggregated by brokerage account, trade side, and second), overlaid with
- b. Public Twitter posts and Discord messages during the episode that mention the at-issue security, as well as a flag for whether the DOJ alleges the message to be false.

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<sup>10</sup> I was asked to exclude roundtrips in options in the profit calculation. The At-Issue Trades had 52 roundtrips in option securities with at least one trade during an At-Issue Trading Episode; in total, the At-Issue Traders realized approximately \$40,493 in profit from these roundtrips.

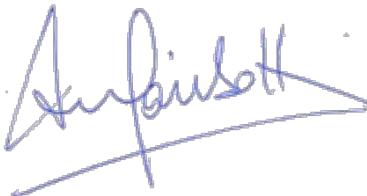
<sup>11</sup> I was also asked to exclude from the profit calculation trades by three investors that I understand to be family members of the Defendants: accounts in the name of Michael Hennessey, Stephanie Hrvatin, and Mariela Rybarczyk realized an additional \$2,381,878.49 in profit from trading during the At-Issue Trading Episodes, distributed as follows: \$1,624,659.15 for Michael Hennessey, \$704,775.48 for Mariela Rybarczyk, and \$52,443.85 for Stephanie Hrvatin.

<sup>12</sup> As I discuss in ¶ 9 of **Appendix C**, 6,828 of these 6,883 roundtrips begin and end during the At-Issue Trading Episode. For these roundtrips, FIFO profits are equivalent to subtracting the total purchase price for units in the roundtrip from the total sale price. There are an additional 55 roundtrips that contain trades during an episode but that begin prior to or end subsequent to the episode. For these roundtrips, I include only the FIFO profits that are realized during the episode. See **Appendix C** for examples of such roundtrips.

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20. **Appendix C** provides a detailed description of how I constructed these Excel files.

Signed on the 15<sup>th</sup> day of June, 2023.



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Maria E. Garibotti

## Exhibit 1

## Profit by Trader and At-Issue Trading Episode

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
Panel A: Total Profit (Loss)													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
Panel B: Profit (Loss) by At-Issue Trading Episode													
1	ABVC	8/10/2021	8/11/2021	\$ -	\$ 59,345	\$ -	\$ 2,025	\$ -	\$ (635)	\$ -	\$ -	\$ -	\$ 60,736
2	ABVC	9/1/2021	9/1/2021	\$ -	\$ -	\$ 14,798	\$ 28,852	\$ -	\$ -	\$ 4,674	\$ -	\$ -	\$ 48,325
3	ABVC	10/12/2021	10/14/2021	\$ -	\$ 65,678	\$ -	\$ 15,724	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 81,402
4	ABVC	11/1/2021	11/1/2021	\$ -	\$ 2,086,048	\$ 44,094	\$ 22,063	\$ -	\$ 1,507	\$ 6,086	\$ -	\$ -	\$ 2,159,798
5	ACST	6/3/2020	6/5/2020	\$ 22,049	\$ -	\$ 4	\$ 522	\$ 21,263	\$ 901	\$ -	\$ -	\$ -	\$ 44,740
6	ACST	9/8/2020	9/8/2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (103)	\$ -	\$ 252	\$ -	\$ 149
7	ACST	11/30/2020	11/30/2020	\$ -	\$ -	\$ -	\$ 81	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 81
8	ACST	12/23/2020	1/12/2021	\$ 348,086	\$ 59,006	\$ 40,085	\$ 20,165	\$ -	\$ 49,729	\$ 70	\$ -	\$ (377)	\$ 516,763
9	ACST	5/19/2021	5/20/2021	\$ 45,908	\$ -	\$ -	\$ (13,406)	\$ -	\$ -	\$ (1,253)	\$ -	\$ -	\$ 31,249
10	ACST	6/4/2021	6/7/2021	\$ -	\$ 7,580	\$ 2,523	\$ -	\$ -	\$ 1,576	\$ -	\$ 2,737	\$ -	\$ 14,416
11	ACST	6/16/2021	7/16/2021	\$ -	\$ 119,922	\$ 46,400	\$ -	\$ -	\$ 400	\$ -	\$ -	\$ -	\$ 166,723
12	ACST	8/3/2021	8/4/2021	\$ -	\$ -	\$ 11,812	\$ 4,667	\$ -	\$ 973	\$ 382	\$ -	\$ 23	\$ 17,856
13	ADMP	9/8/2020	9/10/2020	\$ -	\$ 6,149	\$ -	\$ 55	\$ -	\$ 726	\$ -	\$ -	\$ -	\$ 6,929
14	ADMP	10/7/2020	10/20/2020	\$ -	\$ -	\$ 3,494	\$ 1,138	\$ 5,511	\$ -	\$ 372	\$ (161)	\$ (396)	\$ 9,959
15	ADMP	12/23/2020	12/23/2020	\$ -	\$ -	\$ 7,189	\$ -	\$ -	\$ 6,949	\$ -	\$ -	\$ -	\$ 14,138
16	ADMP	1/20/2021	1/28/2021	\$ (17,119)	\$ -	\$ -	\$ 36,767	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,647
17	ADMP	4/28/2021	5/11/2021	\$ -	\$ 44,755	\$ 130,457	\$ 90,773	\$ 54,440	\$ 8,024	\$ 18,509	\$ -	\$ 544	\$ 347,501
18	AEI	2/16/2021	2/17/2021	\$ -	\$ 70,394	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,394
19	AEI	3/22/2021	3/30/2021	\$ -	\$ 29,084	\$ 21,763	\$ 88,398	\$ 40,525	\$ 29,142	\$ 20,465	\$ 320	\$ 2,475	\$ 232,172
20	AEI	6/21/2021	6/21/2021	\$ -	\$ -	\$ -	\$ 4,850	\$ -	\$ -	\$ 1,293	\$ (34)	\$ -	\$ 6,110
21	AEI	9/2/2021	9/20/2021	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,925	\$ 337	\$ 3,261
22	AEI	3/7/2022	3/11/2022	\$ -	\$ 66,930	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,889	\$ -	\$ 69,818
23	AEMD	9/21/2021	9/22/2021	\$ -	\$ 233,131	\$ -	\$ 32,964	\$ -	\$ 270	\$ 3,535	\$ -	\$ -	\$ 269,899
24	AERC	3/17/2022	3/17/2022	\$ -	\$ -	\$ -	\$ 2,061	\$ -	\$ (0)	\$ 6,109	\$ -	\$ -	\$ 8,171
25	AGRI	7/29/2021	8/2/2021	\$ -	\$ 216,149	\$ -	\$ -	\$ -	\$ 130	\$ -	\$ -	\$ -	\$ 216,279
26	AGRI	10/27/2021	10/27/2021	\$ 32,061	\$ 585,570	\$ 5,396	\$ 142,195	\$ 88,959	\$ 1,759	\$ 53,358	\$ -	\$ -	\$ 909,297
27	AHI	12/1/2021	12/20/2021	\$ 1,182,805	\$ 464,795	\$ -	\$ -	\$ -	\$ 840	\$ 6,586	\$ 373	\$ 14,313	\$ 1,669,711
28	AHPI	6/17/2020	6/22/2020	\$ -	\$ -	\$ 1,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,240
29	AHPI	7/13/2021	8/4/2021	\$ -	\$ 424,269	\$ 28,874	\$ 220,441	\$ -	\$ 9,766	\$ (59,235)	\$ -	\$ (124)	\$ 623,992
30	AHPI	8/10/2021	8/12/2021	\$ -	\$ -	\$ 15,808	\$ 69,505	\$ -	\$ 585	\$ 10,736	\$ -	\$ 67	\$ 96,702
31	AHPI	9/15/2021	9/16/2021	\$ -	\$ 48,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 48,870
32	AHPI	11/26/2021	11/26/2021	\$ -	\$ 364,024	\$ 6,246	\$ 31,582	\$ -	\$ 15,400	\$ 11,814	\$ -	\$ -	\$ 429,067
33	AHT	7/28/2020	7/28/2020	\$ -	\$ 2,658	\$ -	\$ -	\$ -	\$ 1,052	\$ -	\$ -	\$ -	\$ 3,710
34	AHT	11/9/2020	11/13/2020	\$ -	\$ -	\$ -	\$ 4,945	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,945
35	AIHS	9/22/2021	9/24/2021	\$ -	\$ 26,199	\$ -	\$ 44,018	\$ -	\$ 530	\$ 417	\$ -	\$ -	\$ 71,164
36	ALF	5/4/2021	5/13/2021	\$ 952,794	\$ 197,411	\$ (19,296)	\$ 57,156	\$ 85,527	\$ 5,868	\$ 7,377	\$ 890	\$ 12,246	\$ 1,299,973
37	ALF	6/15/2021	6/16/2021	\$ -	\$ -	\$ (176)	\$ 50,810	\$ -	\$ 3,670	\$ 7,925	\$ -	\$ (33)	\$ 62,197
38	ALF	6/22/2021	6/22/2021	\$ -	\$ -	\$ 244	\$ 24,128	\$ -	\$ (675)	\$ 452	\$ -	\$ -	\$ 24,149
39	ALNA	1/26/2021	1/26/2021	\$ -	\$ (563)	\$ 4,540	\$ 323	\$ -	\$ 923	\$ -	\$ -	\$ -	\$ 5,222
40	ALZN	6/15/2021	7/23/2021	\$ 964,001	\$ 16,549	\$ 84,281	\$ 134,059	\$ 43,108	\$ (5,051)	\$ 13,794	\$ (1,576)	\$ 552	\$ 1,249,716
41	ALZN	12/13/2021	12/14/2021	\$ -	\$ -	\$ -	\$ 9,389	\$ -	\$ 2,679	\$ 4,610	\$ -	\$ 6,122	\$ 22,799
42	ALZN	1/4/2022	1/5/2022	\$ -	\$ 21,238	\$ 14,797	\$ -	\$ -	\$ 8	\$ -	\$ -	\$ -	\$ 36,043

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
43	AMCI	11/27/2020	1/22/2021	\$ 190,470	\$ 18,939	\$ 20,728	\$ 171	\$ 29,005	\$ 1,848	\$ -	\$ 3,248	\$ 2,068	\$ 266,478
44	AMPG	3/9/2022	3/31/2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,610	\$ -	\$ 18,610
45	APRE	7/21/2021	7/21/2021	\$ -	\$ 46,013	\$ 11,399	\$ 59,492	\$ -	\$ 6,971	\$ 11,969	\$ -	\$ -	\$ 135,844
46	AREC	2/21/2020	2/21/2020	\$ 686	\$ -	\$ -	\$ -	\$ -	\$ 37	\$ -	\$ -	\$ -	\$ 723
47	AREC	7/24/2020	7/24/2020	\$ -	\$ 1,200	\$ 385	\$ 246	\$ -	\$ 567	\$ -	\$ -	\$ -	\$ 2,398
48	AREC	10/7/2020	10/30/2020	\$ 56,782	\$ 346	\$ 24,583	\$ (226)	\$ -	\$ -	\$ -	\$ 365	\$ (229)	\$ 81,622
49	AREC	11/24/2020	11/24/2020	\$ 43,200	\$ 1,391	\$ -	\$ 1,294	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,885
50	AREC	2/2/2021	3/18/2021	\$ 1,685,165	\$ 14,672	\$ 85,517	\$ 74,064	\$ 16,050	\$ 1,298	\$ 5,991	\$ -	\$ 506	\$ 1,883,263
51	AVGR	7/20/2020	7/30/2020	\$ -	\$ 17,667	\$ (1,749)	\$ -	\$ -	\$ 796	\$ -	\$ -	\$ -	\$ 16,714
52	AVGR	8/4/2020	8/21/2020	\$ 439,746	\$ 153,912	\$ 66,081	\$ 4,122	\$ 78,333	\$ 3,484	\$ -	\$ -	\$ 3,154	\$ 748,833
53	AVGR	8/24/2020	8/31/2020	\$ 37,162	\$ -	\$ 16,074	\$ 114	\$ 1,144	\$ 1,634	\$ -	\$ -	\$ 770	\$ 56,898
54	AVGR	11/10/2020	11/10/2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 143	\$ -	\$ 143
55	AVGR	12/24/2020	12/24/2020	\$ -	\$ -	\$ -	\$ 830	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 830
56	AVGR	1/11/2021	1/11/2021	\$ -	\$ -	\$ -	\$ 5,254	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,254
57	BAOS	4/19/2022	4/27/2022	\$ 230,100	\$ (2,598)	\$ -	\$ -	\$ 2,824	\$ 2,674	\$ 5,964	\$ 4,894	\$ 2,114	\$ 245,971
58	BBI	4/13/2022	4/22/2022	\$ 124,725	\$ 59,843	\$ 8,727	\$ 1,565	\$ 3,009	\$ (2,926)	\$ 2,526	\$ -	\$ -	\$ 197,470
59	BBIG	1/21/2021	1/21/2021	\$ -	\$ -	\$ -	\$ 20,881	\$ -	\$ (1,359)	\$ 11	\$ -	\$ -	\$ 19,533
60	BBIG	2/23/2021	2/23/2021	\$ -	\$ 2,091	\$ 44,814	\$ 1,887	\$ -	\$ (3,796)	\$ 61	\$ -	\$ -	\$ 45,057
61	BBIG	3/22/2021	3/30/2021	\$ 274,043	\$ 76,025	\$ 2,557	\$ 34,840	\$ -	\$ 3,974	\$ 2,296	\$ -	\$ 2,294	\$ 396,029
62	BBIG	4/21/2021	4/23/2021	\$ 16,616	\$ 2,187	\$ (3,137)	\$ (7,846)	\$ -	\$ 3,399	\$ 510	\$ -	\$ -	\$ 11,729
63	BBIG	5/19/2021	7/16/2021	\$ 460,217	\$ 181,309	\$ 476	\$ 15,863	\$ 15,401	\$ 12,822	\$ 608	\$ 2,465	\$ 520	\$ 689,680
64	BBIG	2/10/2022	2/10/2022	\$ -	\$ -	\$ -	\$ (1,322)	\$ -	\$ 253	\$ 2,485	\$ -	\$ -	\$ 1,416
65	BBLG	1/10/2022	1/10/2022	\$ -	\$ -	\$ 8,863	\$ 26,688	\$ -	\$ 1,786	\$ 7,320	\$ -	\$ -	\$ 44,656
66	BCTX	6/2/2021	6/2/2021	\$ -	\$ -	\$ 523	\$ 24,975	\$ -	\$ 374	\$ 1,357	\$ -	\$ -	\$ 27,229
67	BCTX	7/13/2021	8/4/2021	\$ -	\$ 62,675	\$ 19,136	\$ (13,674)	\$ 110,868	\$ 4,008	\$ 22,275	\$ -	\$ 582	\$ 205,870
68	BCTX	12/1/2021	12/1/2021	\$ -	\$ -	\$ 12,996	\$ 31,086	\$ -	\$ 7,488	\$ 16,630	\$ -	\$ -	\$ 68,200
69	BFRI	10/29/2021	11/24/2021	\$ 83,769	\$ 38,247	\$ 36,802	\$ 65,935	\$ -	\$ (20,009)	\$ 34,336	\$ -	\$ 41	\$ 239,120
70	BFRI	3/11/2022	3/22/2022	\$ -	\$ 30,162	\$ -	\$ -	\$ -	\$ -	\$ 9,300	\$ -	\$ -	\$ 39,462
71	BHTG	7/9/2020	7/9/2020	\$ 1,278	\$ 6,779	\$ -	\$ (249)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,808
72	BHTG	8/3/2020	8/4/2020	\$ -	\$ 5,386	\$ 1,818	\$ -	\$ -	\$ 372	\$ -	\$ -	\$ -	\$ 7,576
73	BHTG	9/30/2020	9/30/2020	\$ -	\$ -	\$ 4,378	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,378
74	BHTG	1/13/2021	1/14/2021	\$ -	\$ 34,671	\$ 12,610	\$ -	\$ -	\$ 7,930	\$ 15	\$ -	\$ (27)	\$ 55,199
75	BHTG	2/3/2021	2/11/2021	\$ -	\$ 376,539	\$ (1,864)	\$ (5,790)	\$ -	\$ 7,402	\$ 1,400	\$ -	\$ 1,133	\$ 378,820
76	BHTG	7/19/2021	8/10/2021	\$ -	\$ 27,973	\$ -	\$ -	\$ -	\$ 78	\$ -	\$ -	\$ -	\$ 28,050
77	BRPM	10/26/2021	10/26/2021	\$ -	\$ (18,303)	\$ 3,176	\$ 35,486	\$ -	\$ (3,377)	\$ 21,493	\$ -	\$ -	\$ 38,474
78	BRQS	8/24/2020	8/24/2020	\$ -	\$ -	\$ 8,113	\$ 2,660	\$ -	\$ 422	\$ 194	\$ -	\$ -	\$ 11,389
79	BRQS	11/12/2020	11/19/2020	\$ -	\$ 18,979	\$ 9,538	\$ 41	\$ -	\$ 1,440	\$ -	\$ -	\$ -	\$ 29,999
80	BRQS	1/8/2021	1/13/2021	\$ 37,481	\$ 109,834	\$ 32,234	\$ 230	\$ -	\$ 2,396	\$ 146	\$ -	\$ 430	\$ 182,750
81	BRQS	2/11/2021	2/16/2021	\$ -	\$ -	\$ -	\$ 22,873	\$ 13,440	\$ -	\$ -	\$ -	\$ 127	\$ 36,440
82	BRQS	3/22/2021	3/25/2021	\$ -	\$ 56,478	\$ 63,482	\$ -	\$ -	\$ 14,914	\$ -	\$ -	\$ -	\$ 134,874
83	BRQS	6/4/2021	6/15/2021	\$ -	\$ -	\$ 2,188	\$ -	\$ -	\$ 2,435	\$ 998	\$ -	\$ -	\$ 5,621
84	BRQS	6/30/2021	7/1/2021	\$ -	\$ -	\$ 37,148	\$ 34,862	\$ 1,700	\$ 4,484	\$ 556	\$ -	\$ -	\$ 78,749

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
85	CATB	12/2/2020	12/2/2020	\$ -	\$ -	\$ -	\$ 2,139	\$ -	\$ -	\$ (24)	\$ -	\$ -	\$ 2,115
86	CATB	1/29/2021	1/29/2021	\$ 512,564	\$ (7,827)	\$ -	\$ 19,884	\$ -	\$ -	\$ (74)	\$ -	\$ -	\$ 524,521
87	CBAT	9/14/2020	9/16/2020	\$ -	\$ 13,926	\$ 4,193	\$ (96)	\$ -	\$ 2,647	\$ -	\$ -	\$ -	\$ 20,671
88	CBAT	10/5/2020	10/5/2020	\$ -	\$ -	\$ 961	\$ 459	\$ -	\$ 561	\$ -	\$ -	\$ -	\$ 1,981
89	CBAT	11/10/2020	11/19/2020	\$ -	\$ -	\$ 653	\$ 690	\$ -	\$ -	\$ -	\$ (206)	\$ -	\$ 1,137
90	CBAT	12/21/2020	12/28/2020	\$ -	\$ -	\$ 12,123	\$ -	\$ -	\$ 5,291	\$ -	\$ -	\$ -	\$ 17,414
91	CBAT	1/6/2021	2/23/2021	\$ 132,273	\$ 18,419	\$ 412,224	\$ 50,189	\$ 15,681	\$ 3,774	\$ 1,077	\$ 182	\$ 2,597	\$ 636,416
92	CEI	9/29/2020	10/30/2020	\$ 155,157	\$ 18,722	\$ 44,649	\$ 12,366	\$ 2,951	\$ 8,136	\$ -	\$ (442)	\$ -	\$ 241,540
93	CEI	11/12/2020	11/18/2020	\$ -	\$ 13,670	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,670
94	CEI	8/3/2021	11/30/2021	\$ 4,767,466	\$ 35,192	\$ 7,902	\$ (43,079)	\$ 4,058	\$ 16,743	\$ (5,344)	\$ 316,692	\$ 1,664	\$ 5,101,292
95	CHEK	6/30/2020	7/2/2020	\$ -	\$ -	\$ 300	\$ 65	\$ 37	\$ (58)	\$ -	\$ -	\$ 265	\$ 610
96	CHEK	9/4/2020	9/4/2020	\$ -	\$ 1,792	\$ 1,123	\$ -	\$ -	\$ (82)	\$ -	\$ -	\$ -	\$ 2,833
97	CHEK	12/31/2020	1/4/2021	\$ 414,318	\$ -	\$ -	\$ 952	\$ -	\$ (284)	\$ -	\$ -	\$ -	\$ 414,986
98	CHEK	3/15/2021	3/15/2021	\$ 65,496	\$ -	\$ -	\$ 17,100	\$ 3,456	\$ (3,029)	\$ 1,113	\$ -	\$ 294	\$ 84,432
99	CNTX	10/20/2021	12/21/2021	\$ 2,194,903	\$ 479,961	\$ 8,619	\$ 24,862	\$ (10,815)	\$ 14,890	\$ 12,522	\$ 18,452	\$ 17,713	\$ 2,761,107
100	COMS	2/11/2021	2/23/2021	\$ -	\$ 20,836	\$ 88,529	\$ 74,830	\$ (12,861)	\$ 34,542	\$ 1,082	\$ -	\$ 433	\$ 207,391
101	COMS	10/25/2021	10/25/2021	\$ -	\$ -	\$ 1,649	\$ -	\$ -	\$ 196	\$ 6,463	\$ -	\$ -	\$ 8,308
102	COMS	3/22/2022	3/28/2022	\$ -	\$ -	\$ 1,353	\$ 6,393	\$ -	\$ 135	\$ 8,065	\$ -	\$ -	\$ 15,946
103	CSCW	12/24/2020	12/30/2020	\$ 226,217	\$ 96,873	\$ 4,320	\$ (632)	\$ -	\$ 4,946	\$ -	\$ -	\$ -	\$ 331,725
104	CSCW	3/24/2021	3/24/2021	\$ -	\$ -	\$ 34,820	\$ 16,271	\$ -	\$ (994)	\$ 4,495	\$ -	\$ -	\$ 54,593
105	CSCW	3/31/2021	3/31/2021	\$ -	\$ -	\$ -	\$ 13,919	\$ 3,266	\$ -	\$ 3,245	\$ -	\$ 1,898	\$ 22,328
106	CSCW	4/27/2021	4/27/2021	\$ -	\$ -	\$ 1,534	\$ 826	\$ -	\$ -	\$ 110	\$ -	\$ -	\$ 2,470
107	CSCW	2/17/2022	2/17/2022	\$ -	\$ -	\$ -	\$ (713)	\$ -	\$ -	\$ 1,584	\$ -	\$ -	\$ 871
108	CVM	8/6/2021	8/6/2021	\$ -	\$ -	\$ 3,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,574
109	CXDC	10/26/2021	10/27/2021	\$ -	\$ 426,662	\$ 1,268	\$ -	\$ -	\$ -	\$ -	\$ 547	\$ -	\$ 428,477
110	CYN	10/21/2021	10/22/2021	\$ -	\$ 2,649	\$ 10,503	\$ 19,560	\$ 10,663	\$ (1,390)	\$ 35,350	\$ -	\$ 2,542	\$ 79,878
111	DATS	8/13/2021	10/26/2021	\$ 6,232,845	\$ 68,175	\$ 11,874	\$ (12,248)	\$ 27,857	\$ 1,500	\$ (17,418)	\$ (14,134)	\$ 5,542	\$ 6,303,993
112	DBGI	5/14/2021	5/28/2021	\$ 84,140	\$ 57,447	\$ 2,994	\$ 2,556	\$ -	\$ 3,073	\$ -	\$ -	\$ -	\$ 150,210
113	DBGI	6/10/2021	7/8/2021	\$ -	\$ 1,029,191	\$ 23,878	\$ 39,733	\$ 6,481	\$ 21,468	\$ 14,179	\$ -	\$ 118	\$ 1,135,047
114	DBGI	7/13/2021	8/12/2021	\$ -	\$ 136,181	\$ -	\$ -	\$ -	\$ 42,513	\$ -	\$ -	\$ -	\$ 178,694
115	DBGI	10/28/2021	10/28/2021	\$ 3,863	\$ -	\$ 26,672	\$ 10,166	\$ 170	\$ 1,594	\$ 15,671	\$ -	\$ -	\$ 58,135
116	DLPN	6/3/2020	6/19/2020	\$ 60,590	\$ -	\$ 3,318	\$ 160	\$ -	\$ 514	\$ -	\$ -	\$ -	\$ 64,583
117	DLPN	10/16/2020	10/19/2020	\$ -	\$ -	\$ 4,859	\$ 3,811	\$ 2,676	\$ -	\$ -	\$ -	\$ -	\$ 11,346
118	DLPN	1/12/2021	1/12/2021	\$ 52,603	\$ 38,107	\$ 30,344	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 121,054
119	DLPN	2/11/2021	2/12/2021	\$ -	\$ 88,654	\$ -	\$ -	\$ -	\$ 13,957	\$ 760	\$ -	\$ -	\$ 103,372
120	DLPN	4/23/2021	4/29/2021	\$ -	\$ -	\$ 24,847	\$ 11,554	\$ -	\$ 224	\$ 2,033	\$ -	\$ 104	\$ 38,761
121	DLPN	8/26/2021	8/26/2021	\$ -	\$ 9,577	\$ 8,628	\$ 20,605	\$ -	\$ (974)	\$ 4,690	\$ -	\$ -	\$ 42,527
122	DLPN	10/27/2021	10/27/2021	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,305	\$ -	\$ -	\$ 7,305
123	EARS	4/8/2021	4/8/2021	\$ -	\$ 40,006	\$ 4,960	\$ 12,212	\$ -	\$ 1,646	\$ 2,900	\$ -	\$ 1,279	\$ 63,002
124	EARS	6/3/2021	6/3/2021	\$ -	\$ (3,137)	\$ 9,713	\$ 23,386	\$ -	\$ -	\$ 1,322	\$ -	\$ -	\$ 31,284
125	EXPR	1/22/2021	1/27/2021	\$ 3,449,364	\$ -	\$ 6,171	\$ 2,109	\$ -	\$ 2,907	\$ (22)	\$ -	\$ -	\$ 3,460,530
126	EXPR	3/8/2021	3/10/2021	\$ -	\$ -	\$ 13,310	\$ 9,689	\$ -	\$ 1,124	\$ 1,339	\$ 480	\$ -	\$ 25,942

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
127	EXPR	5/26/2021	6/8/2021	\$ -	\$ -	\$ 3,030	\$ 754	\$ (2,565)	\$ (215)	\$ (1,473)	\$ 2,619	\$ (380)	\$ 1,770
128	EZFL	9/15/2021	10/11/2021	\$ 98,500	\$ 529,043	\$ 11,562	\$ 20,627	\$ -	\$ 30,905	\$ 5,901	\$ 49,647	\$ -	\$ 746,186
129	FCEL	11/13/2020	12/29/2020	\$ -	\$ -	\$ 936	\$ (1,082)	\$ -	\$ -	\$ 12	\$ 4,270	\$ (38)	\$ 4,097
130	FCEL	10/4/2021	10/20/2021	\$ 1,009,629	\$ 3,997	\$ -	\$ (1,706)	\$ 2,163	\$ 41	\$ 2,482	\$ 4,217	\$ 860	\$ 1,021,683
131	FGF	12/30/2020	12/31/2020	\$ 72,660	\$ 43,710	\$ 65,164	\$ -	\$ -	\$ 8,683	\$ -	\$ (1,016)	\$ -	\$ 189,202
132	GIPR	10/12/2021	10/13/2021	\$ -	\$ -	\$ 9,991	\$ 9,216	\$ -	\$ 3,712	\$ 6,989	\$ -	\$ 423	\$ 30,332
133	GMVD	10/28/2021	10/29/2021	\$ -	\$ (24,847)	\$ -	\$ 25,177	\$ 7,777	\$ 999	\$ 18,243	\$ -	\$ -	\$ 27,350
134	GNUS	3/4/2021	3/30/2021	\$ 2,167,554	\$ 102,337	\$ 182,924	\$ 17,158	\$ 40,154	\$ 14,712	\$ 716	\$ -	\$ (589)	\$ 2,524,966
135	GRTX	10/27/2021	10/28/2021	\$ -	\$ 222,133	\$ -	\$ 78,765	\$ 24,066	\$ 25,088	\$ 44,709	\$ -	\$ 1,233	\$ 395,995
136	GRVI	7/6/2021	7/7/2021	\$ -	\$ (9,736)	\$ 4,158	\$ -	\$ -	\$ 1,074	\$ 6,013	\$ -	\$ -	\$ 1,509
137	GRVI	10/19/2021	10/19/2021	\$ -	\$ -	\$ -	\$ 25,939	\$ 16,978	\$ -	\$ 16,869	\$ -	\$ -	\$ 59,786
138	GTEC	10/19/2020	10/20/2020	\$ (269)	\$ 5,702	\$ 28,730	\$ -	\$ -	\$ 7,809	\$ -	\$ -	\$ -	\$ 41,971
139	GTEC	12/7/2020	12/7/2020	\$ 445,501	\$ -	\$ 264	\$ 1,968	\$ -	\$ 185	\$ -	\$ -	\$ -	\$ 447,918
140	GTT	2/24/2021	2/25/2021	\$ -	\$ 83,874	\$ -	\$ -	\$ -	\$ 25,795	\$ 950	\$ -	\$ 847	\$ 111,466
141	GTT	3/1/2021	3/3/2021	\$ -	\$ 41,845	\$ 50,709	\$ 6,832	\$ -	\$ (882)	\$ 864	\$ 484	\$ 3,361	\$ 103,211
142	GTT	3/16/2021	3/17/2021	\$ -	\$ 9,765	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,765
143	HCDI	8/31/2020	8/31/2020	\$ -	\$ -	\$ 3,653	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,653
144	HCDI	12/18/2020	12/21/2020	\$ -	\$ 56,960	\$ 20,033	\$ -	\$ -	\$ 3,311	\$ -	\$ -	\$ -	\$ 80,304
145	HCDI	5/10/2021	5/12/2021	\$ 6,795	\$ -	\$ 4,049	\$ (2,776)	\$ -	\$ (1,310)	\$ 65	\$ -	\$ 20	\$ 6,841
146	HCDI	11/4/2021	11/5/2021	\$ 28,358	\$ 72,119	\$ 41,357	\$ 53,301	\$ 12,921	\$ 11,291	\$ 20,289	\$ 1,112	\$ 5,203	\$ 245,952
147	HCWB	10/18/2021	10/22/2021	\$ -	\$ 63,846	\$ -	\$ 6,288	\$ 1,816	\$ -	\$ 1,559	\$ -	\$ -	\$ 73,509
148	HJLI	8/21/2020	8/21/2020	\$ 33,495	\$ 34,749	\$ (19)	\$ 58	\$ -	\$ 1,566	\$ 31	\$ -	\$ -	\$ 69,880
149	HJLI	4/5/2021	4/5/2021	\$ -	\$ -	\$ 14,593	\$ (1,437)	\$ (3,357)	\$ 3,848	\$ 1,127	\$ -	\$ -	\$ 14,774
150	HJLI	8/3/2021	8/3/2021	\$ -	\$ -	\$ 6,465	\$ 31,419	\$ -	\$ 737	\$ 5,861	\$ -	\$ -	\$ 44,481
151	HOFV	1/8/2021	1/12/2021	\$ -	\$ 15,411	\$ 18,949	\$ 107	\$ -	\$ 18,831	\$ -	\$ -	\$ -	\$ 53,298
152	HOFV	2/3/2021	2/5/2021	\$ -	\$ (1,188)	\$ 58,877	\$ (11)	\$ -	\$ 646	\$ 461	\$ -	\$ 470	\$ 59,256
153	HOFV	3/17/2021	3/30/2021	\$ 7,083,699	\$ 61,116	\$ 55,647	\$ 29,913	\$ (3,451)	\$ 2,786	\$ 8,686	\$ -	\$ 409	\$ 7,238,805
154	HOFV	4/15/2021	4/19/2021	\$ -	\$ 1,589	\$ 210	\$ -	\$ -	\$ 2,329	\$ -	\$ -	\$ -	\$ 4,128
155	IPDN	8/5/2020	8/5/2020	\$ 10,756	\$ 22,034	\$ 716	\$ 20	\$ -	\$ 373	\$ -	\$ -	\$ -	\$ 33,899
156	IPDN	10/7/2020	10/8/2020	\$ 51,965	\$ -	\$ 6,158	\$ 582	\$ -	\$ 1,388	\$ -	\$ -	\$ -	\$ 60,092
157	IPDN	10/15/2020	10/15/2020	\$ -	\$ -	\$ 1,636	\$ -	\$ -	\$ 975	\$ -	\$ -	\$ -	\$ 2,611
158	IPDN	12/1/2020	12/2/2020	\$ -	\$ 3,075	\$ 4,008	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,083
159	IPDN	12/30/2020	12/30/2020	\$ -	\$ -	\$ 176	\$ 1,962	\$ -	\$ 276	\$ -	\$ -	\$ -	\$ 2,414
160	IPDN	1/8/2021	1/11/2021	\$ 93,446	\$ 11,452	\$ -	\$ -	\$ -	\$ 26,876	\$ -	\$ -	\$ -	\$ 131,775
161	IPDN	3/17/2021	3/18/2021	\$ -	\$ 13,839	\$ 97,056	\$ 35,630	\$ 5,429	\$ 3,191	\$ 2,848	\$ -	\$ -	\$ 157,993
162	IPDN	3/29/2021	3/31/2021	\$ -	\$ -	\$ 11,994	\$ -	\$ -	\$ 1,152	\$ -	\$ -	\$ -	\$ 13,146
163	ISIG	10/26/2020	10/27/2020	\$ 31,917	\$ 25,985	\$ 3,413	\$ (721)	\$ -	\$ 489	\$ -	\$ -	\$ -	\$ 61,084
164	ISIG	4/7/2021	4/7/2021	\$ -	\$ -	\$ -	\$ 8,342	\$ 10,414	\$ -	\$ 2,319	\$ -	\$ 647	\$ 21,723
165	ISIG	12/6/2021	12/6/2021	\$ -	\$ 63,724	\$ 2,842	\$ 52,144	\$ -	\$ 2,434	\$ 10,551	\$ -	\$ -	\$ 131,696
166	JAGX	4/1/2020	4/1/2020	\$ -	\$ -	\$ 62	\$ -	\$ -	\$ 101	\$ -	\$ -	\$ -	\$ 163
167	JAGX	7/22/2020	7/29/2020	\$ -	\$ -	\$ 1,288	\$ (188)	\$ -	\$ (61)	\$ -	\$ -	\$ -	\$ 1,039
168	JAGX	10/6/2020	10/8/2020	\$ 23,342	\$ 3,335	\$ (676)	\$ 902	\$ -	\$ 1,369	\$ -	\$ -	\$ 297	\$ 28,569

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
169	JAGX	12/22/2020	12/24/2020	\$ -	\$ 21,646	\$ 11,157	\$ 14,655	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,458
170	JAGX	1/4/2021	1/4/2021	\$ -	\$ -	\$ -	\$ 10,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,574
171	JAGX	1/13/2021	1/13/2021	\$ -	\$ -	\$ 257	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 257
172	JAGX	5/24/2021	6/10/2021	\$ 957,430	\$ -	\$ (7,998)	\$ 885	\$ 25,414	\$ 1,025	\$ (287)	\$ 1,932	\$ 6,054	\$ 984,456
173	JAGX	12/21/2021	12/21/2021	\$ -	\$ 53,472	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 53,472
174	JAN	1/16/2020	1/23/2020	\$ 3,333	\$ -	\$ -	\$ -	\$ -	\$ 4	\$ -	\$ -	\$ -	\$ 3,336
175	JAN	2/5/2021	2/5/2021	\$ -	\$ -	\$ 8,182	\$ 6,711	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,894
176	JAN	5/13/2021	5/26/2021	\$ 27,482	\$ 1,113	\$ 4,023	\$ -	\$ -	\$ (4,828)	\$ -	\$ -	\$ -	\$ 27,329
177	KALV	2/9/2021	2/9/2021	\$ 444,993	\$ -	\$ 137,863	\$ -	\$ -	\$ 37,367	\$ -	\$ -	\$ -	\$ 620,222
178	KAVL	10/13/2021	10/20/2021	\$ 697,222	\$ 63,831	\$ -	\$ 20,143	\$ -	\$ 1,465	\$ 5,263	\$ -	\$ 40	\$ 787,964
179	KAVL	2/15/2022	2/15/2022	\$ -	\$ -	\$ 1,800	\$ 4,762	\$ -	\$ 502	\$ -	\$ -	\$ -	\$ 7,064
180	KAVL	3/15/2022	3/15/2022	\$ -	\$ -	\$ -	\$ 16,416	\$ -	\$ 423	\$ -	\$ -	\$ -	\$ 16,838
181	KERN	11/5/2020	12/4/2020	\$ 69,344	\$ 4,780	\$ 23,419	\$ (927)	\$ -	\$ -	\$ (526)	\$ 180	\$ 361	\$ 96,632
182	KERN	1/6/2021	2/12/2021	\$ 1,875,249	\$ 614	\$ 69,298	\$ (4,333)	\$ 3,186	\$ 45,577	\$ 5	\$ -	\$ 406	\$ 1,990,003
183	KERN	3/1/2021	3/11/2021	\$ 33,872	\$ -	\$ 20,042	\$ 2,276	\$ -	\$ -	\$ -	\$ -	\$ 65	\$ 56,255
184	KERN	5/18/2021	5/18/2021	\$ -	\$ -	\$ 2,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,230
185	KERN	9/13/2021	9/14/2021	\$ -	\$ 28,604	\$ 81	\$ 8,018	\$ -	\$ 6,525	\$ 6,959	\$ -	\$ -	\$ 50,186
186	KERN	3/24/2022	3/24/2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,027	\$ -	\$ -	\$ 1,027
187	KIQ	10/20/2021	11/18/2021	\$ -	\$ 145,862	\$ -	\$ -	\$ -	\$ (577)	\$ -	\$ 9,465	\$ -	\$ 154,750
188	KTIA	11/23/2021	11/23/2021	\$ -	\$ 100,311	\$ 4,071	\$ 127,951	\$ -	\$ 4,129	\$ 50,733	\$ -	\$ -	\$ 287,195
189	KXIN	7/8/2020	7/8/2020	\$ 8,860	\$ 6,391	\$ -	\$ 136	\$ -	\$ 14	\$ -	\$ -	\$ -	\$ 15,402
190	KXIN	10/16/2020	10/27/2020	\$ -	\$ -	\$ 1,667	\$ 628	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,295
191	KXIN	2/10/2021	2/11/2021	\$ 69,838	\$ 94,303	\$ 48,582	\$ -	\$ 9,086	\$ 3,168	\$ 1,043	\$ -	\$ 2,724	\$ 228,745
192	KXIN	3/16/2021	3/22/2021	\$ -	\$ 816	\$ 7,121	\$ -	\$ -	\$ 9,358	\$ -	\$ -	\$ -	\$ 17,295
193	KXIN	8/6/2021	8/9/2021	\$ -	\$ -	\$ 29,543	\$ 46,287	\$ -	\$ (643)	\$ 601	\$ -	\$ -	\$ 75,788
194	KXIN	11/2/2021	11/2/2021	\$ -	\$ -	\$ 994	\$ (4,629)	\$ -	\$ -	\$ 19,200	\$ -	\$ -	\$ 15,565
195	LEDS	2/13/2020	2/28/2020	\$ 6,033	\$ -	\$ -	\$ -	\$ -	\$ 506	\$ -	\$ -	\$ -	\$ 6,539
196	LEDS	9/28/2020	9/28/2020	\$ -	\$ -	\$ 766	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 766
197	LEDS	2/9/2021	2/11/2021	\$ -	\$ -	\$ 56,359	\$ 14,656	\$ -	\$ 21,716	\$ 3,050	\$ -	\$ 1,877	\$ 97,658
198	LEDS	6/1/2021	6/24/2021	\$ -	\$ -	\$ 55,148	\$ 25,230	\$ -	\$ 948	\$ 715	\$ -	\$ -	\$ 82,042
199	LEDS	8/30/2021	9/3/2021	\$ -	\$ -	\$ 104	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 104
200	LLIT	1/28/2021	3/12/2021	\$ 404,920	\$ 350,485	\$ 129,214	\$ 8,120	\$ -	\$ 77,505	\$ -	\$ -	\$ -	\$ 970,243
201	LLIT	4/20/2021	5/12/2021	\$ (44,709)	\$ 12,828	\$ 31,714	\$ 7,485	\$ -	\$ 7,726	\$ 3,292	\$ -	\$ (30)	\$ 18,306
202	LMFA	9/28/2020	9/30/2020	\$ 17,217	\$ 30,018	\$ 14,127	\$ 6,564	\$ -	\$ 6,913	\$ -	\$ -	\$ -	\$ 74,839
203	LMFA	12/1/2020	12/4/2020	\$ -	\$ 4,563	\$ -	\$ (197)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,366
204	LMFA	1/8/2021	1/15/2021	\$ 586,610	\$ -	\$ 9,497	\$ 2,858	\$ -	\$ (2,602)	\$ -	\$ -	\$ -	\$ 596,363
205	LMFA	7/8/2021	7/9/2021	\$ 88,168	\$ -	\$ 7,473	\$ 3,116	\$ -	\$ -	\$ 4,129	\$ -	\$ -	\$ 102,886
206	LOTZ	6/7/2021	6/8/2021	\$ (59,572)	\$ 3,009	\$ -	\$ 19,865	\$ 13,678	\$ 714	\$ 5,777	\$ -	\$ -	\$ (16,529)
207	MARPS	3/7/2022	3/7/2022	\$ -	\$ -	\$ -	\$ 2,480	\$ -	\$ -	\$ -	\$ 8,516	\$ -	\$ 10,996
208	MDRR	3/11/2021	3/15/2021	\$ -	\$ 111,518	\$ -	\$ 2,807	\$ 26,635	\$ -	\$ 5,108	\$ -	\$ 6,522	\$ 152,591
209	MDRR	5/7/2021	5/17/2021	\$ 94,054	\$ 11,438	\$ 37,822	\$ 82,298	\$ (1,980)	\$ 10,289	\$ 9,724	\$ -	\$ (813)	\$ 242,832
210	MDRR	6/8/2021	6/10/2021	\$ -	\$ 58,439	\$ -	\$ 7,163	\$ -	\$ 1,515	\$ 140	\$ -	\$ -	\$ 67,257

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
211	METX	10/16/2020	10/16/2020	\$ -	\$ -	\$ 837	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 837
212	METX	12/17/2020	12/21/2020	\$ (3,422)	\$ 3,879	\$ 2,424	\$ -	\$ -	\$ 741	\$ -	\$ -	\$ -	\$ 3,622
213	METX	2/4/2021	2/5/2021	\$ -	\$ 22,520	\$ (2,188)	\$ 8,141	\$ -	\$ 3,979	\$ -	\$ -	\$ -	\$ 32,451
214	METX	3/12/2021	3/17/2021	\$ 68,642	\$ (14,016)	\$ -	\$ 12,619	\$ -	\$ 4,396	\$ 371	\$ -	\$ -	\$ 72,013
215	METX	4/16/2021	5/6/2021	\$ -	\$ (11,116)	\$ 6,847	\$ 12,801	\$ -	\$ 741	\$ (868)	\$ -	\$ -	\$ 8,406
216	METX	9/29/2021	9/30/2021	\$ -	\$ -	\$ 2,367	\$ -	\$ -	\$ 445	\$ -	\$ -	\$ -	\$ 2,811
217	METX	10/12/2021	10/29/2021	\$ (26,823)	\$ 311,881	\$ 330	\$ -	\$ (12,596)	\$ 4,477	\$ 3,746	\$ 145,203	\$ 59	\$ 426,278
218	METX	11/5/2021	11/11/2021	\$ 200,042	\$ -	\$ 21,909	\$ 6,353	\$ 30,520	\$ 10	\$ 18,786	\$ 996	\$ 11,235	\$ 289,851
219	METX	3/15/2022	3/15/2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24	\$ 2,708	\$ -	\$ -	\$ 2,731
220	MFH	10/16/2020	10/21/2020	\$ (428)	\$ -	\$ 7,561	\$ 2,011	\$ -	\$ 1,051	\$ (22)	\$ -	\$ (65)	\$ 10,110
221	MFH	3/22/2021	3/23/2021	\$ 34,633	\$ -	\$ 7,391	\$ 34,740	\$ 27,445	\$ -	\$ (2,364)	\$ -	\$ (349)	\$ 101,496
222	MGLD	3/10/2022	4/11/2022	\$ 347,708	\$ 22,805	\$ -	\$ -	\$ -	\$ 760	\$ -	\$ 2,415	\$ -	\$ 373,688
223	MITQ	7/26/2021	7/26/2021	\$ -	\$ 7,409	\$ -	\$ 15,148	\$ -	\$ -	\$ 29,229	\$ -	\$ -	\$ 51,786
224	MKD	3/2/2022	3/29/2022	\$ 199,309	\$ -	\$ 49	\$ 2,371	\$ -	\$ 2,855	\$ 7,550	\$ 1,208	\$ -	\$ 213,343
225	MTSL	6/19/2020	6/23/2020	\$ 98,776	\$ -	\$ 2,448	\$ 110	\$ -	\$ (80)	\$ -	\$ -	\$ -	\$ 101,254
226	MTSL	4/16/2021	4/16/2021	\$ -	\$ -	\$ 3,849	\$ 7,368	\$ (822)	\$ -	\$ -	\$ -	\$ -	\$ 10,395
227	MTSL	6/29/2021	7/22/2021	\$ -	\$ 441,747	\$ 33,269	\$ 158,004	\$ -	\$ 37,820	\$ 38,887	\$ -	\$ -	\$ 709,729
228	MULN	11/2/2021	11/12/2021	\$ 994,686	\$ 69,755	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31	\$ -	\$ 1,064,471
229	MYSZ	10/26/2021	11/2/2021	\$ 1,133,399	\$ (48,538)	\$ 5,037	\$ 16,814	\$ 27,612	\$ -	\$ 21,678	\$ 1,878	\$ 17,091	\$ 1,174,969
230	NAKD	7/24/2020	7/27/2020	\$ -	\$ 8,311	\$ (512)	\$ 65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,865
231	NAKD	9/24/2020	9/25/2020	\$ 12,682	\$ 6,054	\$ -	\$ -	\$ -	\$ 955	\$ -	\$ 18	\$ -	\$ 19,709
232	NAKD	1/4/2021	1/28/2021	\$ 9,615,201	\$ 824,672	\$ 76,420	\$ 20,734	\$ -	\$ 82,758	\$ (64)	\$ 4,873	\$ 724	\$ 10,625,319
233	NAKD	2/8/2021	2/12/2021	\$ 86,730	\$ 121,590	\$ 233,278	\$ 34,093	\$ -	\$ 39,082	\$ 2,839	\$ (700)	\$ 4,538	\$ 521,450
234	NAKD	3/24/2021	3/25/2021	\$ -	\$ (421)	\$ 16,611	\$ -	\$ -	\$ 9,396	\$ -	\$ 931	\$ -	\$ 26,518
235	NAKD	4/29/2021	5/6/2021	\$ 39,399	\$ 80,079	\$ 85,420	\$ 56,979	\$ 1,990	\$ 6,867	\$ 7,173	\$ 2,034	\$ (2,231)	\$ 277,709
236	NAKD	9/24/2021	10/4/2021	\$ -	\$ 160,645	\$ 12,139	\$ 54,357	\$ -	\$ 1,860	\$ 7,887	\$ -	\$ -	\$ 236,888
237	NETE	10/13/2020	10/14/2020	\$ 27,309	\$ 3,537	\$ 11,376	\$ 3,807	\$ -	\$ 1,511	\$ -	\$ -	\$ -	\$ 47,539
238	NETE	11/13/2020	11/13/2020	\$ 16,563	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,563
239	NETE	11/16/2020	11/25/2020	\$ 35,523	\$ 1,160	\$ 13,327	\$ 580	\$ -	\$ 1,483	\$ -	\$ 1,572	\$ 9	\$ 53,655
240	NETE	2/10/2021	2/19/2021	\$ 134,899	\$ -	\$ 72,638	\$ 12,092	\$ -	\$ 7,999	\$ 1,200	\$ -	\$ 1,135	\$ 229,962
241	NETE	4/6/2021	4/6/2021	\$ -	\$ -	\$ 3,705	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,705
242	NETE	8/20/2021	8/24/2021	\$ -	\$ -	\$ 13,482	\$ 3,478	\$ -	\$ (205)	\$ -	\$ -	\$ -	\$ 16,756
243	NOVN	3/2/2021	3/2/2021	\$ 34,748	\$ 23,252	\$ -	\$ 1,004	\$ -	\$ 6,602	\$ -	\$ -	\$ -	\$ 65,606
244	NOVN	5/13/2021	5/13/2021	\$ -	\$ 15,155	\$ -	\$ 1,614	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,769
245	NOVN	6/14/2021	6/15/2021	\$ 158,084	\$ 72,889	\$ 3,180	\$ 6,875	\$ -	\$ (2,541)	\$ 4,692	\$ 1,758	\$ -	\$ 244,937
246	NTEC	2/2/2021	2/3/2021	\$ 26,659	\$ (5,812)	\$ 53,788	\$ 30,670	\$ -	\$ (893)	\$ 674	\$ -	\$ -	\$ 105,087
247	NTEC	2/10/2021	2/10/2021	\$ -	\$ -	\$ 13,099	\$ 5,575	\$ 5,414	\$ -	\$ -	\$ -	\$ -	\$ 24,087
248	NTEC	5/10/2021	5/11/2021	\$ -	\$ 72,004	\$ 891	\$ -	\$ -	\$ -	\$ 708	\$ -	\$ 969	\$ 74,571
249	NTRB	10/1/2021	10/12/2021	\$ 1,483,799	\$ 80,337	\$ (23,559)	\$ 10,376	\$ (10,016)	\$ (2,328)	\$ (4,387)	\$ -	\$ 154	\$ 1,534,377
250	NXTD	7/2/2020	7/2/2020	\$ -	\$ -	\$ 1,733	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,733
251	NXTD	12/1/2020	2/19/2021	\$ 333,214	\$ 14,093	\$ 42,365	\$ 41,128	\$ -	\$ 10,410	\$ (15)	\$ -	\$ (16)	\$ 441,181
252	NXTD	3/9/2021	3/10/2021	\$ -	\$ -	\$ 28,210	\$ 16,586	\$ -	\$ 1,316	\$ 3,842	\$ -	\$ 5,256	\$ 55,210

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
253	NXTD	7/26/2021	7/28/2021	\$ -	\$ 849	\$ (6)	\$ 4,190	\$ 6,810	\$ (1,361)	\$ (10,092)	\$ -	\$ -	\$ 390
254	NXTD	10/27/2021	11/2/2021	\$ (5,127)	\$ 393,235	\$ 30,636	\$ 5,384	\$ 1,982	\$ -	\$ 6,020	\$ -	\$ -	\$ 432,131
255	NXTD	12/15/2021	12/15/2021	\$ -	\$ 46,650	\$ 13,947	\$ (10,862)	\$ -	\$ 2,788	\$ 1,294	\$ -	\$ -	\$ 53,816
256	OBLN	9/3/2020	9/3/2020	\$ -	\$ 985	\$ -	\$ -	\$ -	\$ (73)	\$ -	\$ -	\$ -	\$ 912
257	OBLN	12/7/2020	12/7/2020	\$ -	\$ -	\$ 1,828	\$ 2,632	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,461
258	OBLN	1/20/2021	1/22/2021	\$ -	\$ -	\$ -	\$ 20,599	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,599
259	OBLN	2/10/2021	2/10/2021	\$ -	\$ -	\$ 15,116	\$ -	\$ -	\$ 23,142	\$ -	\$ -	\$ -	\$ 38,258
260	OBLN	3/5/2021	3/5/2021	\$ -	\$ 6,680	\$ -	\$ -	\$ -	\$ (2,312)	\$ -	\$ -	\$ -	\$ 4,368
261	OBLN	3/16/2021	3/16/2021	\$ -	\$ 434	\$ 6,827	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,262
262	OBLN	5/10/2021	5/10/2021	\$ -	\$ 32,434	\$ 5	\$ 3,587	\$ -	\$ 190	\$ -	\$ -	\$ -	\$ 36,216
263	OBLN	5/18/2021	5/24/2021	\$ -	\$ 123,567	\$ 2,370	\$ 9,218	\$ -	\$ 697	\$ 321	\$ -	\$ -	\$ 136,174
264	OGEN	7/9/2020	7/30/2020	\$ -	\$ 14,209	\$ 4,392	\$ 954	\$ -	\$ 742	\$ -	\$ -	\$ -	\$ 20,298
265	OGEN	12/2/2020	12/7/2020	\$ 48,439	\$ 90,039	\$ 54,959	\$ 1,310	\$ -	\$ 6,380	\$ (10)	\$ -	\$ -	\$ 201,116
266	OGEN	12/22/2020	12/22/2020	\$ -	\$ -	\$ 1,300	\$ -	\$ -	\$ (945)	\$ -	\$ -	\$ -	\$ 355
267	OGEN	1/5/2021	1/7/2021	\$ 9,998	\$ -	\$ 6,219	\$ 13,459	\$ -	\$ 285	\$ -	\$ -	\$ -	\$ 29,961
268	OGEN	2/8/2021	2/8/2021	\$ -	\$ -	\$ -	\$ 10,731	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,731
269	OGEN	3/9/2021	3/9/2021	\$ -	\$ -	\$ -	\$ 2,901	\$ -	\$ (500)	\$ 30	\$ -	\$ -	\$ 2,431
270	OGEN	4/23/2021	4/26/2021	\$ -	\$ -	\$ 7,867	\$ 2,461	\$ -	\$ 566	\$ 1,652	\$ -	\$ -	\$ 203
271	OGEN	12/20/2021	12/21/2021	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,099	\$ -	\$ 9,099
272	ONTX	7/16/2020	8/26/2020	\$ 296,341	\$ (979)	\$ 2,734	\$ 255	\$ 77,222	\$ 1,303	\$ -	\$ -	\$ (1,851)	\$ 375,026
273	ONTX	11/30/2020	12/22/2020	\$ -	\$ 1,601	\$ 18,915	\$ (193)	\$ -	\$ 17,083	\$ -	\$ -	\$ -	\$ 37,406
274	ONTX	2/3/2021	3/19/2021	\$ (215,729)	\$ 801,685	\$ 119,839	\$ 933	\$ 92,938	\$ 18,647	\$ 2,028	\$ -	\$ 4,429	\$ 824,770
275	ONTX	5/18/2021	5/18/2021	\$ -	\$ -	\$ -	\$ 4,730	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,730
276	OXBR	7/6/2020	7/7/2020	\$ -	\$ 2,799	\$ -	\$ (34)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,765
277	OXBR	7/15/2020	7/15/2020	\$ -	\$ 4,792	\$ -	\$ (45)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,747
278	OXBR	8/10/2020	8/11/2020	\$ 1,877	\$ 9,630	\$ -	\$ 433	\$ -	\$ 584	\$ -	\$ -	\$ -	\$ 12,524
279	OXBR	9/25/2020	10/8/2020	\$ 10,222	\$ 39,967	\$ 13,381	\$ (1,156)	\$ -	\$ 392	\$ 141	\$ (317)	\$ -	\$ 62,629
280	OXBR	12/28/2020	12/29/2020	\$ -	\$ 40,657	\$ -	\$ 2,046	\$ -	\$ 549	\$ -	\$ -	\$ -	\$ 43,252
281	OXBR	1/14/2021	1/27/2021	\$ 286,133	\$ 12,248	\$ 11,681	\$ 3,688	\$ -	\$ 4,095	\$ 206	\$ 21	\$ 722	\$ 318,794
282	OXBR	5/20/2021	6/17/2021	\$ 161,445	\$ 96,485	\$ 43,267	\$ 34,370	\$ -	\$ 4,734	\$ 702	\$ -	\$ 1,870	\$ 342,874
283	OXBR	7/16/2021	7/19/2021	\$ -	\$ 140,561	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140,561
284	PIXY	3/29/2022	3/31/2022	\$ -	\$ -	\$ 1,968	\$ 20,695	\$ 2,543	\$ 2,362	\$ 14,088	\$ -	\$ -	\$ 41,657
285	PPSI	6/12/2020	6/12/2020	\$ 26	\$ -	\$ 841	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 866
286	PPSI	7/22/2020	7/22/2020	\$ -	\$ -	\$ 1,817	\$ -	\$ -	\$ 114	\$ -	\$ -	\$ -	\$ 1,931
287	PPSI	8/4/2020	8/7/2020	\$ -	\$ -	\$ 6,803	\$ -	\$ -	\$ 1,345	\$ -	\$ -	\$ -	\$ 8,148
288	PPSI	8/25/2020	8/26/2020	\$ -	\$ -	\$ 3,029	\$ -	\$ -	\$ 46	\$ 103	\$ -	\$ -	\$ 3,177
289	PPSI	9/23/2020	9/25/2020	\$ -	\$ -	\$ 1,216	\$ -	\$ -	\$ -	\$ -	\$ (458)	\$ -	\$ 759
290	PPSI	10/6/2020	10/9/2020	\$ -	\$ -	\$ 9,689	\$ 1,180	\$ 273	\$ -	\$ -	\$ (1,189)	\$ -	\$ 9,953
291	PPSI	11/23/2020	11/23/2020	\$ -	\$ -	\$ -	\$ 1,036	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,036
292	PPSI	12/4/2020	12/4/2020	\$ 5,930	\$ -	\$ -	\$ 5,977	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,906
293	PPSI	1/12/2021	1/22/2021	\$ 583,657	\$ (3,715)	\$ 4,754	\$ (1,360)	\$ -	\$ 7,751	\$ -	\$ -	\$ -	\$ 591,087
294	PPSI	2/8/2021	2/16/2021	\$ -	\$ -	\$ 25,579	\$ (820)	\$ -	\$ -	\$ 627	\$ -	\$ -	\$ 25,386

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
295	PPSI	11/8/2021	11/12/2021	\$ -	\$ -	\$ 27,095	\$ 92,278	\$ 17,137	\$ 3,514	\$ 22,292	\$ -	\$ -	\$ 162,317
296	PPSI	11/17/2021	11/17/2021	\$ -	\$ -	\$ -	\$ 24,892	\$ -	\$ -	\$ (8,235)	\$ -	\$ -	\$ 16,657
297	PPSI	12/21/2021	12/21/2021	\$ -	\$ -	\$ -	\$ 1,150	\$ -	\$ 419	\$ 338	\$ -	\$ -	\$ 1,907
298	PRFX	11/3/2020	11/4/2020	\$ (5,357)	\$ 24,186	\$ (1,851)	\$ -	\$ -	\$ 862	\$ -	\$ -	\$ -	\$ 17,840
299	PRFX	7/13/2021	7/30/2021	\$ -	\$ 705,979	\$ 4,539	\$ 45,842	\$ -	\$ 2,082	\$ 17,949	\$ -	\$ -	\$ 776,390
300	REDU	4/8/2021	4/8/2021	\$ -	\$ -	\$ 9,021	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,021
301	REDU	10/15/2021	10/26/2021	\$ -	\$ 391,179	\$ (1,797)	\$ 38,681	\$ -	\$ 464	\$ 2,185	\$ 40,356	\$ (73)	\$ 470,995
302	RGLS	6/11/2020	7/30/2020	\$ 9,935	\$ 14,307	\$ 5,479	\$ 1,266	\$ 3,958	\$ 6,238	\$ -	\$ -	\$ 658	\$ 41,842
303	RGLS	3/11/2021	3/12/2021	\$ -	\$ 91,749	\$ 38,829	\$ 69,412	\$ 74,976	\$ 1,979	\$ 16,761	\$ -	\$ 8,865	\$ 302,572
304	RGLS	6/3/2021	6/10/2021	\$ -	\$ 17,131	\$ 64,246	\$ 56,058	\$ 19,952	\$ (19,464)	\$ 18,567	\$ -	\$ 8,285	\$ 164,776
305	RHE	2/22/2021	2/22/2021	\$ -	\$ 27,280	\$ -	\$ -	\$ -	\$ 4,208	\$ 130	\$ -	\$ -	\$ 31,618
306	RHE	4/28/2021	5/26/2021	\$ 75,069	\$ 3,961	\$ 7,297	\$ 13,825	\$ -	\$ 1,339	\$ 3,142	\$ -	\$ -	\$ 104,633
307	RHE	8/30/2021	8/31/2021	\$ -	\$ 238,249	\$ 4,891	\$ 35,228	\$ -	\$ 2	\$ 597	\$ -	\$ -	\$ 278,968
308	RNAZ	7/9/2021	7/13/2021	\$ -	\$ 367,764	\$ 8,500	\$ 42,675	\$ -	\$ 5,547	\$ 39,221	\$ -	\$ -	\$ 463,706
309	RNXT	11/10/2021	11/10/2021	\$ -	\$ -	\$ 10,836	\$ 59,425	\$ -	\$ 9,307	\$ 50,849	\$ -	\$ -	\$ 130,418
310	RNXT	11/30/2021	11/30/2021	\$ -	\$ -	\$ -	\$ 64,472	\$ -	\$ 482	\$ 28,446	\$ -	\$ -	\$ 93,401
311	SALM	10/21/2021	10/21/2021	\$ -	\$ -	\$ 14,985	\$ 14,008	\$ 18,766	\$ 6,855	\$ 10,850	\$ -	\$ -	\$ 65,464
312	SFET	8/6/2021	8/9/2021	\$ -	\$ -	\$ 3,879	\$ 11,476	\$ -	\$ (630)	\$ 1,961	\$ -	\$ -	\$ 16,685
313	SINO	2/8/2021	2/22/2021	\$ 470,745	\$ -	\$ 186,347	\$ (105)	\$ -	\$ 1,505	\$ 872	\$ -	\$ 979	\$ 660,343
314	SINO	3/17/2021	3/18/2021	\$ 3,261	\$ 19,335	\$ 68,726	\$ (2,551)	\$ (4,043)	\$ 22,185	\$ 3,007	\$ -	\$ 231	\$ 110,151
315	SINO	4/20/2021	4/20/2021	\$ -	\$ (4,712)	\$ 1,246	\$ 3,610	\$ -	\$ -	\$ 294	\$ -	\$ -	\$ 437
316	SNDL	11/23/2020	12/3/2020	\$ 199,027	\$ 54,746	\$ 6,602	\$ (4,642)	\$ -	\$ 5,023	\$ 70	\$ 343	\$ -	\$ 261,168
317	SNDL	1/6/2021	2/17/2021	\$ 17,164,384	\$ 274,550	\$ 77,803	\$ (97,678)	\$ 10,789	\$ 13,797	\$ (125)	\$ (1,646)	\$ 570	\$ 17,442,445
318	SNDL	3/1/2021	3/2/2021	\$ -	\$ -	\$ 16,157	\$ 11,082	\$ -	\$ -	\$ 500	\$ -	\$ 44	\$ 27,784
319	SNDL	10/21/2021	10/21/2021	\$ -	\$ -	\$ -	\$ 10,970	\$ 4,606	\$ 4,293	\$ 5,741	\$ -	\$ -	\$ 25,609
320	SNOA	4/1/2021	4/1/2021	\$ -	\$ -	\$ 14,978	\$ 14,680	\$ -	\$ 3,025	\$ 5,929	\$ -	\$ 1,542	\$ 40,154
321	SNOA	5/3/2021	5/3/2021	\$ -	\$ 70,576	\$ 55,192	\$ 45,094	\$ -	\$ -	\$ 24,668	\$ -	\$ 1,999	\$ 197,530
322	SOS	1/6/2021	1/6/2021	\$ -	\$ 87,413	\$ -	\$ -	\$ -	\$ 3,542	\$ -	\$ -	\$ -	\$ 90,955
323	SOS	1/27/2021	2/16/2021	\$ 2,566	\$ 221,255	\$ 45,438	\$ 2,230	\$ -	\$ 12,125	\$ -	\$ -	\$ -	\$ 283,615
324	SOS	8/9/2021	8/11/2021	\$ -	\$ -	\$ (2,508)	\$ -	\$ -	\$ -	\$ 833	\$ -	\$ -	\$ (1,675)
325	STAF	5/10/2021	5/10/2021	\$ -	\$ -	\$ 3,522	\$ -	\$ -	\$ 50	\$ 428	\$ -	\$ 854	\$ 4,853
326	STAF	6/30/2021	7/2/2021	\$ 92,523	\$ 366,373	\$ (2,210)	\$ 22,588	\$ -	\$ 11,489	\$ 2,009	\$ -	\$ 208	\$ 492,979
327	STAF	7/19/2021	7/21/2021	\$ -	\$ 132,839	\$ 14,358	\$ 61,901	\$ -	\$ 23,206	\$ (848)	\$ -	\$ -	\$ 231,456
328	SUPV	2/17/2021	2/23/2021	\$ -	\$ 235,307	\$ 90,114	\$ -	\$ 20,372	\$ 22,691	\$ 1,692	\$ -	\$ 186	\$ 370,363
329	SURF	5/5/2021	6/3/2021	\$ -	\$ -	\$ 102,507	\$ 129,692	\$ 125,826	\$ 6,916	\$ 28,743	\$ -	\$ 5,884	\$ 399,567
330	SURG	11/9/2021	11/9/2021	\$ -	\$ 41,124	\$ 26,879	\$ 30,232	\$ 1,654	\$ 23,540	\$ 36,728	\$ -	\$ -	\$ 160,155
331	SXTC	6/18/2020	9/4/2020	\$ 32,673	\$ 7,400	\$ 16,759	\$ 1,988	\$ 17,842	\$ 8,411	\$ -	\$ -	\$ (2,149)	\$ 82,924
332	SXTC	9/11/2020	9/14/2020	\$ -	\$ 15,079	\$ 1,863	\$ 2,381	\$ -	\$ 1,833	\$ -	\$ -	\$ (69)	\$ 21,088
333	SXTC	7/15/2021	7/19/2021	\$ -	\$ 123,098	\$ 13,163	\$ 122,021	\$ (11,101)	\$ 12,630	\$ 10,281	\$ -	\$ 999	\$ 271,091
334	SXTC	1/19/2022	3/1/2022	\$ -	\$ (159,826)	\$ 990	\$ 92,189	\$ -	\$ 5,396	\$ 17,851	\$ -	\$ -	\$ (43,399)
335	SYPR	8/11/2020	8/11/2020	\$ -	\$ 16,102	\$ 531	\$ -	\$ -	\$ 1,579	\$ -	\$ -	\$ -	\$ 18,212
336	SYPR	2/24/2021	2/25/2021	\$ -	\$ -	\$ 1,434	\$ 20,993	\$ -	\$ 12,960	\$ 1,650	\$ -	\$ 309	\$ 37,346

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
				\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
337	TGC	1/20/2021	2/25/2021	\$ (361,508)	\$ 669,177	\$ 125,804	\$ 99,048	\$ 37,440	\$ 144,937	\$ 6,360	\$ -	\$ 2,495	\$ 723,753
338	TMBR	7/31/2020	7/31/2020	\$ -	\$ -	\$ 5,392	\$ -	\$ 508	\$ 345	\$ -	\$ -	\$ -	\$ 6,244
339	TMBR	9/24/2020	10/21/2020	\$ -	\$ 11,639	\$ 779	\$ -	\$ -	\$ 146	\$ -	\$ -	\$ -	\$ 12,564
340	TMBR	12/9/2020	12/15/2020	\$ -	\$ 50,329	\$ 8,425	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58,754
341	TMBR	1/25/2021	1/27/2021	\$ -	\$ 89,529	\$ 17,220	\$ -	\$ -	\$ 2,257	\$ 37	\$ -	\$ 23	\$ 109,066
342	TMBR	3/11/2021	3/17/2021	\$ -	\$ 9,368	\$ 61,214	\$ 31,616	\$ -	\$ (2,152)	\$ 3,914	\$ -	\$ 959	\$ 104,918
343	TRCH	8/21/2020	8/24/2020	\$ -	\$ -	\$ 2,073	\$ -	\$ -	\$ 57	\$ -	\$ -	\$ -	\$ 2,130
344	TRCH	9/21/2020	9/21/2020	\$ -	\$ 1,627	\$ -	\$ -	\$ -	\$ 801	\$ -	\$ -	\$ -	\$ 2,428
345	TRCH	2/10/2021	2/23/2021	\$ 2,492	\$ 98,701	\$ 336,138	\$ 148,131	\$ 288,603	\$ 29,831	\$ 2,364	\$ -	\$ 2,170	\$ 908,429
346	TRCH	4/22/2021	4/28/2021	\$ -	\$ 36,219	\$ -	\$ 1,897	\$ -	\$ -	\$ 71	\$ -	\$ -	\$ 38,186
347	UPC	3/29/2021	4/1/2021	\$ -	\$ -	\$ 5,466	\$ 15,979	\$ -	\$ -	\$ 2,861	\$ -	\$ 37	\$ 24,343
348	UPC	7/22/2021	7/23/2021	\$ -	\$ 193,923	\$ 1,503	\$ 148,902	\$ -	\$ -	\$ 15,647	\$ -	\$ -	\$ 359,975
349	USEG	1/7/2020	1/8/2020	\$ 5,221	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,221
350	USEG	2/19/2020	2/21/2020	\$ 6,575	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ -	\$ 6,576
351	USEG	9/29/2020	9/30/2020	\$ 29,563	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14	\$ 1,001	\$ -	\$ 30,578
352	USEG	1/19/2021	1/28/2021	\$ -	\$ 20,689	\$ 27,597	\$ 1,905	\$ -	\$ 3,424	\$ -	\$ -	\$ -	\$ 53,615
353	USEG	3/8/2021	3/10/2021	\$ -	\$ -	\$ 8,583	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,583
354	USEG	6/1/2021	6/2/2021	\$ -	\$ -	\$ 1,036	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,036
355	USEG	7/14/2021	7/14/2021	\$ -	\$ 268,089	\$ -	\$ 163,372	\$ -	\$ 9,414	\$ 7,391	\$ -	\$ -	\$ 448,266
356	USEG	3/7/2022	3/7/2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 904	\$ -	\$ -	\$ 904
357	VISL	3/3/2020	3/4/2020	\$ 17,262	\$ -	\$ -	\$ 1,429	\$ -	\$ 1,434	\$ -	\$ -	\$ -	\$ 20,125
358	VISL	4/23/2020	4/30/2020	\$ 24,807	\$ -	\$ -	\$ 1,070	\$ -	\$ 3,866	\$ -	\$ -	\$ 11	\$ 29,755
359	VISL	2/4/2021	3/30/2021	\$ -	\$ 81,271	\$ 175,569	\$ 94,192	\$ 123,468	\$ 2,094	\$ 6,841	\$ -	\$ 5,410	\$ 488,844
360	VRPX	3/26/2021	4/14/2021	\$ -	\$ 41,870	\$ 1,797	\$ 1,812	\$ -	\$ 3,996	\$ 603	\$ -	\$ (1,122)	\$ 48,956
361	VRPX	6/30/2021	7/15/2021	\$ -	\$ 585,657	\$ 56,288	\$ 199,811	\$ (10,705)	\$ (151)	\$ 37,386	\$ -	\$ -	\$ 868,287
362	VRPX	8/10/2021	8/18/2021	\$ -	\$ 10,009	\$ 3,817	\$ 39,428	\$ -	\$ (68)	\$ 3,654	\$ -	\$ -	\$ 56,839
363	VTVT	7/27/2020	7/30/2020	\$ 59,231	\$ -	\$ 17,742	\$ (49)	\$ -	\$ 648	\$ -	\$ -	\$ 509	\$ 78,081
364	VTVT	10/29/2020	12/15/2020	\$ 288,165	\$ (42)	\$ 4,259	\$ (3,216)	\$ (2,903)	\$ 418	\$ 120	\$ (553)	\$ 703	\$ 286,951
365	VTVT	2/2/2021	2/8/2021	\$ 372,357	\$ -	\$ 15,556	\$ 4,714	\$ -	\$ 9,882	\$ 10	\$ -	\$ -	\$ 402,518
366	VTVT	2/22/2021	3/1/2021	\$ -	\$ 21,848	\$ 5,868	\$ 15,994	\$ -	\$ 3,460	\$ -	\$ -	\$ 3,494	\$ 50,665
367	VTVT	4/13/2021	4/13/2021	\$ -	\$ -	\$ -	\$ 23,099	\$ -	\$ 3,189	\$ -	\$ -	\$ (11)	\$ 26,277
368	WAFU	7/30/2020	7/30/2020	\$ -	\$ -	\$ -	\$ 438	\$ 1,010	\$ -	\$ -	\$ -	\$ -	\$ 1,449
369	WAFU	1/27/2021	2/8/2021	\$ 307,384	\$ 101,139	\$ 58,396	\$ 1,679	\$ -	\$ 22,351	\$ 22	\$ -	\$ -	\$ 490,970
370	WAFU	3/26/2021	3/31/2021	\$ -	\$ -	\$ 461	\$ 11,026	\$ -	\$ 2,505	\$ -	\$ -	\$ -	\$ 13,993
371	WAFU	4/19/2021	4/19/2021	\$ -	\$ -	\$ 4,583	\$ -	\$ -	\$ (466)	\$ -	\$ -	\$ -	\$ 4,118
372	WORX	8/25/2020	8/26/2020	\$ -	\$ 34,179	\$ -	\$ -	\$ -	\$ 2,174	\$ -	\$ -	\$ -	\$ 36,353
373	WORX	9/4/2020	9/10/2020	\$ -	\$ -	\$ 7,629	\$ -	\$ -	\$ 118	\$ -	\$ -	\$ -	\$ 7,747
374	WORX	9/16/2020	9/23/2020	\$ -	\$ 14,443	\$ 1,171	\$ 633	\$ -	\$ 1,791	\$ -	\$ -	\$ (11)	\$ 18,027
375	WORX	7/9/2021	7/13/2021	\$ -	\$ 156,304	\$ 48,581	\$ 240,241	\$ -	\$ 2,892	\$ 24,957	\$ -	\$ -	\$ 472,974
376	WORX	7/30/2021	7/30/2021	\$ -	\$ -	\$ 3,111	\$ -	\$ -	\$ (334)	\$ -	\$ -	\$ -	\$ 2,777
377	WORX	8/4/2021	8/9/2021	\$ -	\$ -	\$ 7,654	\$ 37,218	\$ -	\$ (428)	\$ 2,304	\$ -	\$ -	\$ 46,748
378	WPG	6/1/2021	6/9/2021	\$ 738,517	\$ 20,096	\$ 1,190	\$ 9,054	\$ -	\$ 6,510	\$ 4,306	\$ -	\$ 253	\$ 779,926

**Exhibit 1**  
**Profit by Trader and At-Issue Trading Episode**

At-Issue Episode ID	Episode Symbol	Episode Start Date	Episode End Date	Constantin, Edward	Rybarczyk, John	Matlock, Perry	Deel, Gary	Hennessey, Mitchell	Sabo, Francis	Cooperman, Tom	Hrvatin, Stefan	Knight, Daniel	Total
<b>Panel A: Total Profit (Loss)</b>													
-	-	-	-	\$ 80,957,987	\$ 21,976,374	\$ 6,641,266	\$ 6,092,985	\$ 1,938,072	\$ 1,654,018	\$ 1,340,207	\$ 661,421	\$ 212,170	\$ 121,474,499
<b>Panel B: Profit (Loss) by At-Issue Trading Episode</b>													
379	WPG	9/1/2021	9/1/2021	\$ 26,386	\$ (6,155)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,231
380	WWR	8/20/2020	8/21/2020	\$ 881	\$ 43,652	\$ 1,499	\$ 46	\$ -	\$ 3,314	\$ -	\$ -	\$ -	\$ 49,393
381	WWR	9/14/2020	9/15/2020	\$ -	\$ -	\$ 1,690	\$ -	\$ -	\$ 1,298	\$ -	\$ -	\$ -	\$ 2,988
382	WWR	9/25/2020	10/6/2020	\$ 19,208	\$ -	\$ 2,914	\$ (101)	\$ -	\$ 332	\$ (135)	\$ (1,223)	\$ -	\$ 20,994
383	WWR	10/20/2020	10/21/2020	\$ -	\$ -	\$ 2,105	\$ -	\$ -	\$ (1,120)	\$ -	\$ -	\$ -	\$ 985
384	WWR	10/26/2020	10/26/2020	\$ -	\$ -	\$ (1,083)	\$ 3,418	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,335
385	WWR	11/2/2020	11/23/2020	\$ -	\$ -	\$ 7,636	\$ 471	\$ -	\$ 1,079	\$ -	\$ 103	\$ 76	\$ 9,365
386	WWR	1/6/2021	1/26/2021	\$ 19,151	\$ -	\$ 7,038	\$ 41,761	\$ 1,330	\$ 2,341	\$ (21)	\$ 3,032	\$ 60	\$ 74,691
387	WWR	2/5/2021	2/19/2021	\$ -	\$ -	\$ 149,341	\$ 26,303	\$ -	\$ 28,470	\$ 1,991	\$ -	\$ 2,160	\$ 208,265
388	WWR	3/11/2021	3/25/2021	\$ -	\$ 9,007	\$ -	\$ 40,702	\$ (2,757)	\$ 2,826	\$ 3,632	\$ -	\$ 2,673	\$ 56,083
389	WWR	3/30/2022	4/8/2022	\$ -	\$ -	\$ (273)	\$ -	\$ 352	\$ (865)	\$ -	\$ 2,981	\$ -	\$ 2,194
390	XRTX	11/3/2021	11/5/2021	\$ 442,800	\$ 41,748	\$ 34,904	\$ 15,397	\$ 23,386	\$ 10,104	\$ 22,833	\$ 4,787	\$ 4,375	\$ 600,335
391	YVR	6/3/2020	6/4/2020	\$ -	\$ -	\$ -	\$ 570	\$ -	\$ 324	\$ -	\$ -	\$ -	\$ 894
392	YVR	7/30/2020	7/30/2020	\$ -	\$ 4,175	\$ -	\$ -	\$ -	\$ 589	\$ -	\$ -	\$ -	\$ 4,764
393	YVR	3/12/2021	3/31/2021	\$ 788,070	\$ (737)	\$ 56,187	\$ 42,203	\$ 73,559	\$ 3,570	\$ 12,587	\$ -	\$ -	\$ 975,438
394	YVR	7/13/2021	7/16/2021	\$ -	\$ 150,001	\$ (201)	\$ 119,402	\$ -	\$ 9,061	\$ 29,052	\$ -	\$ -	\$ 307,315
395	YVR	9/2/2021	9/3/2021	\$ -	\$ -	\$ 2,491	\$ 3,140	\$ -	\$ (101)	\$ 773	\$ -	\$ -	\$ 6,303
396	ZSAN	3/21/2022	4/5/2022	\$ 194,381	\$ -	\$ -	\$ -	\$ (359)	\$ 1,683	\$ (3,385)	\$ -	\$ 478	\$ 192,797
397	ZYNE	2/2/2021	2/23/2021	\$ 1,696,156	\$ 14,895	\$ 47,032	\$ 24,594	\$ -	\$ 7,751	\$ 294	\$ -	\$ 1,062	\$ 1,791,785

**Sources**

Brokerage Account Trading Files for At-Issue Traders (see Appendix B)

At-Issue Trading Episodes from 20230609\_Trading Events.xlsx

**Appendix A**  
**MARIA EUGENIA GARIBOTTI, PH.D.**  
**Vice President**

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Chicago, IL 60601

Dr. Garibotti specializes in the application of economics and statistics to questions arising in a variety of settings, including antitrust, finance and commercial litigation. In her antitrust work, Dr. Garibotti has evaluated market definition, market structure, competitive effects, damages, and efficiencies in merger reviews and investigations. She has assessed the appropriateness of class certification and evaluated allegations of collusive behavior, refusal to deal, exclusive selling arrangements, tying, and non-compete clauses in litigation, in sectors including pharmaceuticals, hospitals, health insurance, auto parts, finance, and tech. Her work in finance has included cases related to residential mortgage-backed securities, alleged collusion in financial markets, valuation of OTC-traded firms, and investigations of spoofing allegations. Dr. Garibotti has been deposed and has provided expert testimony at trial.

#### **EDUCATION**

2011            Ph.D., economics, New York University  
2002            B.S., (*magna cum laude*), economics, Universidad de San Andrés, Buenos Aires

#### **PROFESSIONAL EXPERIENCE**

2012–Present    Analysis Group, Inc.  
                    *Vice President (2018–Present)*  
                    *Manager (2015–2017)*  
                    *Associate (2012–2015)*  
2011–2012       Barnard College  
                    *Term Assistant Professor*

#### **TESTIMONY EXPERIENCE**

- **In Re: Arizona Theranos Incorporated Litigation**  
***US District Court, Arizona***  
Submitted a rebuttal expert report on behalf of Defendant Walgreens responding to Plaintiffs' estimate of aggregate class damages
- **Elmagin Capital, LLC v. Chen et al.**  
***US District Court, Eastern District of Pennsylvania***  
Provided deposition and trial testimony on economic analysis of trade secrets allegations in algorithmic trading, on behalf of Defendants.

- **U.S. v. Bases et al.**  
*US District Court, Northern District of Illinois*  
Provided testimony on Analysis Group's analysis of futures trading patterns on behalf of the United States.
- **U.S. v. Vorley et al.**  
*US District Court, Northern District of Illinois*  
Provided testimony on Analysis Group's analysis of futures trading patterns on behalf of the United States.

## **SELECTED CONSULTING EXPERIENCE**

### **Antitrust, Competition, and Regulation**

- **PenguinRandomHouse-Simon & Schuster Merger**  
Supported Professor Ted Snyder's expert analysis on behalf of the merging parties in the case of a merger of book publishers focused on the purchase of publishing rights from authors, which included market definition, measurement of market shares, assessment of competitive effects and potential entry, and analysis of efficiencies.
- **Confidential Platform Antitrust Matters**  
Supported academic affiliate in multiple antitrust matters related to electronic platforms, analyzing market definition, shares, and allegations of monopoly power.
- **Ingevity Corp., et al. v. BASF Corp.**  
Supported Dr. Divya Mathur in analysis of antitrust counterclaims and calculation of antitrust damages on behalf of counter-plaintiff BASF.
- **Anthem-Cigna Merger**  
Supported Professor David Dranove's expert analysis on behalf of the DOJ in the case of a merger of major health insurers, which included market definition, measurement of market shares, assessment of competitive effects and potential entry, and analysis of proposed efficiencies.
- **EnergySolutions-Waste Control Specialists Merger**  
Supported Professor John Mayo's expert analysis on behalf of the DOJ in the case of the merger between two close competitors in the business of low-level radioactive waste disposal, including market definition, measurement of market shares, and assessment of competitive effects and proposed efficiencies.
- **Insurance Merger**  
Worked with the DOJ in the investigation of a proposed merger of two health insurers. Supported an academic affiliate who advised the DOJ on issues pertaining to market definition, entry, and competitive effects.
- **DOJ Investigation of Health Care Payer-Provider Contractual Practices**  
Investigated competition issues related to steering and tiering contractual provisions between health care providers and payers in a major health care system on behalf of the DOJ.
- **Delayed Generic Entry Litigation**

- Supported expert analysis of direct and indirect purchaser class certification in multiple delayed generic entry and reverse payment cases.
- Supported expert analysis of potential damages to indirect purchasers from alleged delayed generic entry, which involved assessing the existence of a certifiable class in multiple cases.
- Supported FDA expert on analysis of regulatory decisions by FDA.
- **Confidential hospital litigation matter**  
Supported expert analysis of hospital competition in the rural Midwest. Analyzed potential effects of a new entrant.
- **Confidential pharma-related class action**  
Supported industry expert analysis of pharmacy benefit managers and pharmacy benefit design, highlighting the various dimensions of differentiation in services provided and prices paid for pharmaceutical products.
- **TMT Management Group, LLC v. U.S. Bank National Association, et al.**  
*US District Court, District of Minnesota*  
Analyzed antitrust liability and damages related to refusal to deal and tying claims involving the sale of demand deposit account debt portfolios.
- **Confidential Automotive Parts Antitrust Investigations**  
Performed economic analyses of the impact of alleged price-fixing and bid-rigging, including overcharge and pass-through, on behalf of major automotive parts manufacturers. Cleaned and analyzed large sales and cost datasets.
- **Confidential Labor Antitrust Case**  
Supported expert analysis of market definition and damages in a labor antitrust case related to non-compete clauses. Supported expert analysis of non-compete contractual clauses and damages calculation.
- **Certain Integrated Circuits with Voltage Regulators and Products**  
*US International Trade Commission*  
Assessed the economic impact of an import ban on certain microprocessors, servers, and personal computers on behalf of a major microprocessor manufacturer and two major original equipment manufacturers (OEMs).
- **Government Investigation into Competition Practices at Mexico City Airport**  
Assisted experts in the development of a white paper presented to the Mexican Competition Authority (COFECE) which framed issues related to the allocation of take-off and landing slots at the Mexico City International Airport, and addressed the basics of airline economics, including the common features of hub-and-spoke competition and slot concentration.
- **Confidential merger investigations**  
Supported parties seeking merger approval before the Federal Trade Commission (FTC) and the Canadian Competition Bureau.
- **Confidential DOJ Investigation**  
Supported expert analysis of precious metal derivatives trading patterns on behalf of a bank.

## Finance and Securities

- **Federal Housing Finance Agency Residential Mortgage-Backed Security (RMBS) Cases and Other RMBS Cases**
  - Supported expert analysis of appropriateness of statistical sampling for re-underwriting purposes in various RMBS cases. Also supported the experts in preparing an opinion on the correct use of extrapolation techniques. Analyzed large datasets and programmed statistical simulations.
  - Supported expert analysis of loan performance in various RMBS cases, focusing on issues of statistical significance. Analyzed large datasets and programmed statistical hypothesis tests.
  - Supported expert analysis of due diligence issues in the context of RMBS litigation.
- **Confidential Loan Servicing Litigation**
  - Supported expert analysis of damages related to servicing of residential mortgages.
- **Pension Fund Administrator Investment Disputes**

Supported industry expert analysis of pension fund investment management practices and industry standard practice for pre- and post-investment due diligence, and contractual obligations and industry norms of hedge fund administrators.
- **Financial Industry Regulatory Authority (FINRA) Arbitration**

Supported expert analysis of investment policy guidelines and portfolio composition in an arbitration matter related to auction rate securities.
- **Confidential DOJ Investigation**

Supported expert analysis of precious metal derivatives trading patterns on behalf of a bank.
- **Confidential Litigation**

Supported expert valuation analysis of two OTC-traded companies.
- **Confidential State Investigation**

Analyzed FX trading patterns.

## SELECTED SPEAKING ENGAGEMENTS

American Bar Association (ABA) Antitrust Law Section Webinar, “Distribution Essentials: Two-Sided Platforms in Amex and Beyond,” June 8, 2023

ABA Antitrust Law Section Panel Summer Series, “Antitrust: A Day in the Life,” June 30, 2022

ABA Antitrust Law Section Spring Meeting, “Economics: Fundamentals,” April 6, 2022

ABA Antitrust Law Section Panel, “Antitrust: A Day in the Life,” November 15, 2021

New York State Bar Association (NYSBA) Antitrust Section, Unilateral Conduct Committee, “Latest Legal and Economic Developments in Exclusive Dealing Cases,” November 25, 2019

ABA Continuing Legal Education (CLE) Webinar, “Introduction to Regression Analysis in Antitrust Litigation,” November 2, 2017

## SELECTED ARTICLES

Banterghansa, Chanont ‘Big’, Garibotti, Maria, and Zetenyi, Kristof, “Efficiencies in the second-score auction model,” *Concurrences Law & Economics*, No. 2-2023.

Garibotti, Maria and Gorin, Brian, “United States: Platform Economics and Mergers,” in *Global Competition Review Digital Markets Guide, Second Edition*, November 25, 2022

Samra, Emily and Garibotti, Maria, “Update on the Commentary on the DOJ Bank Merger Guidelines,” *The Exchange: Insurance and Financial Services Developments*, ABA Section of Antitrust Law, Summer 2022

Davis, Ted, Ellman, Brian, Fink, Stephen and Garibotti, Maria, “Meeting the Burden: The Predominance Requirement in Pharmaceutical Class Actions,” *Health Care Bulletin*, 2021

Garibotti, Maria, “United States v. EnergySolutions – Perspectives on Litigating Antitrust Merger Challenges,” *Cartel & Joint Conduct Review*, Newsletter of the ABA Section of Antitrust Law Joint Conduct Committee, Vol. 13 No. 1, Winter 2017

## LANGUAGES

Spanish (native), English (fluent)

**Appendix B**  
**Materials Reviewed**

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**1. Legal Documents**

Superseding Indictment, United States of American v. Edward Constantinescu, et al., 4:22-cr-612-S, February 8, 2023  
Pages from 5th Circuit Pattern Jury Instructions.pdf

**2. Trading Documents****2.A At-Issue Trading Episodes**

20230609\_Trading Events.xlsx

**2.B Brokerage Account Trading Records**

2TZ07175 Orders.csv

2TZ07175 Trades.csv

blotter 36756133 - Constantin -Etrade.xlsx

blotter 37481764 - Matlock - Etrade.xlsx

Order Tickets 1 - Interactive Brokers.xlsx

Order Tickets 2 - Interactive Brokers.xlsx

Plato 03\_23\_2022.1.xlsx

report\_1 - TD.csv

report\_2 - TD.csv

report\_3 - TD.csv

report\_4 - TD.csv

report\_5 - TD.csv

RYBARCZYK Blotter 2.xlsx

RYBARCZYK Blotter 3.xlsx

RYBARCZYK Blotter 4.xlsx

RYBARCZYK Blotter1.xlsx

Trade & Order Blotter.xlsx

Trade Blotter - TradeStation - Matlock.xlsx

Trade Blotter U3063007.xlsx

TRADE HISTORY REPORT -TD - Hvartin - Stefan and Stephanie.xlsx

Webull - 5IJ59954 Mitchell Hennessey Time Stamped Orders.xlsx

Webull - 5KU41041 Stefan Hrvatin Time Stamped Orders.xlsx

Webull - 5KV54402 Perry Matlock.csv

Webull - 5KX16182 Gary Deel.csv

Webull - 5MV17047 Tom Cooperman.csv

Webull - 5NB36671 John Joseph Rybarczyk Time Stamped Orders.xlsx

Webull - 5WA85933 Edward Constantin.csv

**2.C Brokerage Timezone E-mails**

Etrade.pdf

IB.pdf

TD and Schwab.pdf

Trade Station.pdf

Trade Zero.pdf

Webull.pdf

**3. Communication Records****3.A Alleged False Statements**

Defendants Social Media Messages for Episodes.xlsx

Sabo Discord Messages for Episodes.xlsx

**3.B Atlas Trading Discord Server**

458013311846449152.csv

**Appendix B**  
**Materials Reviewed**

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**3.C Cell Phone Data**

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Deel\_iPhone 13 Pro Max\_2023-01-11\_Report\_2023-02-06\_1.ufdr  
Apple\_A2483 iPhone 13 Pro\_2023-02-08\_Report\_2023-02-10\_Report (CLEAN Version).ufdr

**3.D Defendant Twitter Posts**

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Attachment\_F\_priority\_files\_008d.xlsx  
DipDeity.xlsx  
Hugh\_Henne.xlsx  
LadeBackk.xlsx  
MrZackMorris.xlsx  
notoriousalerts.xlsx  
ohheytommy.xlsx  
PJ\_Matlock.xlsx  
Ultra\_Calls.xlsx

**3.E Raw and HTML-Compatible Discord and Twitter Communications**

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Contents of "DOJ-DISCORD re" folder  
Contents of "DOJ-TWITTER-0000000001\_Reprocessed" folder  
Contents of "DOJ-TWTR-0000000001" folder

**4. Price Volume Data**

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**4.A FINRA Trade Inquiries**

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ABVC Trade Inquiry 081121.xlsx  
AEMD Trade Inquiry 092221 1.xlsx  
AEMD Trade Inquiry 092221 2.xlsx  
AEMD Trade Inquiry 092221 3.xlsx  
AIHS Trade Inquiry 092321.xlsx  
ALZN Trade Inquiry 063021.xlsx  
AREC Trade Inquiry 031722.xlsx  
AREC Trade Inquiry 100720 1.xlsx  
AREC Trade Inquiry 100720 2.xlsx  
AREC Trade Inquiry 100720 3.xlsx  
AREC Trade Inquiry 100720 4.xlsx  
AREC Trade Inquiry 100720 5.xlsx  
AREC Trade Inquiry 100720 6.xlsx  
AREC Trade Inquiry 100720 7.xlsx  
AREC Trade Inquiry 100720.xlsx  
BAOS Trade Inquiry 042222.xlsx  
BAOS Trade Inquiry 042522.xlsx  
BBI Trade Inquiry 041922.xlsx  
BBI Trade Inquiry 042222.xlsx  
BBLG Trade Inquiry 011022 1.xlsx  
BBLG Trade Inquiry 011022 2.xlsx  
CNTX Trade Inquiry 102121.xlsx  
CNTX Trade Inquiry 102221.xlsx  
CNTX Trade Inquiry 110221.xlsx  
CNTX Trade Inquiry 120121.xlsx  
EZFL Trade Inquiry 101121.xlsx  
FCEL Trade Inquiry 101421.xlsx  
FCEL Trade Inquiry 101821 1.xlsx  
FCEL Trade Inquiry 101821 2.xlsx  
FCEL Trade Inquiry 101921 1.xlsx  
FCEL Trade Inquiry 101921 2.xlsx  
GTT 031621.xlsx

**Appendix B**  
**Materials Reviewed**

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GTT Trade Inquiry 030121.xlsx  
GTT Trade Inquiry 030221.xlsx  
GTT Trade Inquiry 030321.xlsx  
GTT Trade Inquiry 030421.xlsx  
GTT Trade Inquiry 031521.xlsx  
GTT Trade Inquiry 031721.xlsx  
GTT Trade Inquiry 031821.xlsx  
HCWB Trade Inquiry 101921.xlsx  
METX Trade Inquiry 102621 1.xlsx  
METX Trade Inquiry 102621 2.xlsx  
METX Trade Inquiry 102621 3.xlsx  
METX Trade Inquiry 102621 4.xlsx  
METX Trade Inquiry 102621 5.xlsx  
METX Trade Inquiry 102621 6.xlsx  
METX Trade Inquiry 102621 7.xlsx  
MFH Trade Inquiry 032221.xlsx  
MITQ Trade Inquiry 072621.xlsx  
MYSZ Trade Inquiry 102621 1.xlsx  
MYSZ Trade Inquiry 102621 2.xlsx  
MYSZ Trade Inquiry 102621 3.xlsx  
MYSZ Trade Inquiry 102621 4.xlsx  
MYSZ Trade Inquiry 102621 5.xlsx  
MYSZ Trade Inquiry 102621 6.xlsx  
NAKD Trade Inquiry 092721 1.xlsx  
NAKD Trade Inquiry 092721 2.xlsx  
NAKD Trade Inquiry 092821 1.xlsx  
NAKD Trade Inquiry 092821 2.xlsx  
NAKD Trade Inquiry 092821 3.xlsx  
ONTX Trade Inquiry 021721 1.xlsx  
ONTX Trade Inquiry 021721 2.xlsx  
ONTX Trade Inquiry 021721 3.xlsx  
ONTX Trade Inquiry 021721 4.xlsx  
ONTX Trade Inquiry 021821 1.xlsx  
ONTX Trade Inquiry 021821 2.xlsx  
ONTX Trade Inquiry 072820 - 073120.xlsx  
PIXY Trade Inquiry 032922.xlsx  
RGLS Trade Inquiry 031221.xlsx  
RGLS Trade Inquiry 061021.xlsx  
SFET Trade Inquiry 080621.xlsx  
SNOA Trade Inquiry 050321.xlsx  
STAF Trade Inquiry 070121.xlsx  
STAF Trade Inquiry 070221 3.xlsx  
STAF Trade Inquiry 072021 1.xlsx  
STAF Trade Inquiry 072021 2.xlsx  
SUPV Trade Inquiry 021821.xlsx  
SURF Trade Inquiry 051921.xlsx  
SURG Trade Inquiry 110921.xlsx  
SXTC Trade Inquiry 071621 1.xlsx  
SXTC Trade Inquiry 071621 2.xlsx  
SXTC Trade Inquiry 091420.xlsx  
TRCH Trade Inquiry 021021 1.xlsx  
TRCH Trade Inquiry 021021 2.xlsx  
TRCH Trade Inquiry 021021 3.xlsx  
TRCH Trade Inquiry 021021 4.xlsx  
TRCH Trade Inquiry 021021 5.xlsx

**Appendix B**  
**Materials Reviewed**

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TRCH Trade Inquiry 021021 6.xlsx  
TRCH Trade Inquiry 021621 1.xlsx  
TRCH Trade Inquiry 021621 3.xlsx  
TRCH Trade Inquiry 021621 4.xlsx  
TRCH Trade Inquiry 021621 5.xlsx  
TRCH Trade Inquiry 021621 6.xlsx  
TRCH Trade Rpt 021621 2.xlsx  
UPC Trade Inquiry 072221.xlsx  
UPC Trade Inquiry 072321.xlsx  
VISL Trade Inquiry 030221.xlsx  
VRPX Trade Inquiry 071421 1.xlsx  
VRPX Trade Inquiry 071421 2.xlsx  
VTVT Trade Inquiry 072720.xlsx  
VTVT Trade Inquiry 072820.xlsx  
XRTX Trade Inquiry 110321.xlsx  
XRTX Trade Inquiry 110421.xlsx  
XRTX Trade Inquiry 110521.xlsx  
YVR Trade Inquiry 090221.xlsx

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**4.B Bloomberg Price and Volume Data**

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PV Data - ABVC.xlsx  
PV Data - AEMD.xlsx  
PV Data - AIHS.xlsx  
PV Data - ALZN.xlsx  
PV Data - AREC (MKUL).xlsx  
PV Data - BAOS.xlsx  
PV Data - BBI (FRTX).xlsx  
PV Data - BBLG.xlsx  
PV Data - CBAT.xlsx  
PV Data - CEI.xlsx  
PV Data - CNTX.xlsx  
PV Data - DATS.xlsx  
PV Data - EZFL.xlsx  
PV Data - FCEL.xlsx  
PV Data - GTT (GTTNQ).xlsx  
PV Data - HCWB.xlsx  
PV Data - METX.xlsx  
PV Data - MFH.xlsx  
PV Data - MITQ.xlsx  
PV Data - MYSZ.xlsx  
PV Data - NAKD (CENN).xlsx  
PV Data - ONTX.xlsx  
PV Data - PIXY.xlsx  
PV Data - RGLS.xlsx  
PV Data - SFET (ALAR).xlsx  
PV Data - SNOA.xlsx  
PV Data - STAF.xlsx  
PV Data - SUPV.xlsx  
PV Data - SURF.xlsx  
PV Data - SURG.xlsx  
PV Data - SXTC.xlsx  
PV Data - TRCH (MMAT).xlsx  
PV Data - UPC.xlsx  
PV Data - VISL.xlsx  
PV Data - VRPX.xlsx

**Appendix B**  
**Materials Reviewed**

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PV Data - VTVT.xlsx

PV Data - XRTX.xlsx

PV Data - YVR.xlsx

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**5. Other Publicly Available Documents**

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**5.A SEC Filings**

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Mullen Automotive Inc., SEC Form 8-K, November 12, 2021, available at

[https://www.sec.gov/Archives/edgar/data/1499961/000110465921138173/tm2132610d1\\_8k.htm](https://www.sec.gov/Archives/edgar/data/1499961/000110465921138173/tm2132610d1_8k.htm).

Exhibit 99.1 to CarLotz, Inc., SEC Form 8-K, January 21, 2021, available at

[https://www.sec.gov/Archives/edgar/data/1759008/000110465921006346/tm213854d1\\_ex99-1.htm](https://www.sec.gov/Archives/edgar/data/1759008/000110465921006346/tm213854d1_ex99-1.htm).

**5.B Websites**

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InteractiveBrokers, "Viewing Open Orders," 2023, available at <https://www.ibkrguides.com/ecam/viewing-open-orders.htm>

National Institute of Standards and Technology, "Local Time FAQs," March 2023, available at <https://www.nist.gov/pml/time-and-frequency-division/local-time-faqs>.

SAS Help Center, "Working with Dates and Times by Using the ISO 8601 Basic and Extended Notations," February 2023, available at [https://documentation.sas.com/doc/en/pgmsascdc/9.4\\_3.5/leforinforref/p1a0qt18rxydrkn1b0rtdfh2t8zs.htm](https://documentation.sas.com/doc/en/pgmsascdc/9.4_3.5/leforinforref/p1a0qt18rxydrkn1b0rtdfh2t8zs.htm).

Securities and Exchange Commission, "Investor Bulletin: Stop, Stop-Limit, and Trailing Stop Orders," July 13, 2017, available at <https://www.sec.gov/resources-investors/investor-alerts-bulletins/stop-stop-limits-trading-stop-orders>

## **APPENDIX C - DATA APPENDIX**

1. I received data from the DOJ covering (i) trading records for the At-Issue Traders; (ii) Twitter posts for the Defendants (i.e., excluding Francis Sabo); (iii) chat records for the “Atlas Trading” Discord server; and (iv) a list of statements the At-Issue Traders made on Twitter and Discord that the DOJ alleges to be false.<sup>13</sup> In this appendix, I first describe the trading records I received and the steps I took to combine the trading records and calculate profit for the At-Issue Trading Episodes. I then describe the communications I received, including Twitter posts and Discord chat records. Finally, I describe how I created Excel files combining the trading records and communications.

### **A. Trading Data and Profit Calculation**

2. I received from the DOJ 26 trading files from six brokerages covering the At-Issue Traders’ trading. These files include order placement, modification, cancelation, and execution records across symbols for these traders.<sup>14</sup>
3. In **Appendix Exhibit 1**, I list each trading file I received as well as the traders, accounts, and dates covered by each file. I also list fields and information used to calculate profits for the At-Issue Trading Episodes, which include the time zone for the time stamps in the original file, the fields used to identify filled orders, and other fields used for the profit calculation. Counting both purchases and sales, these files cover approximately \$53.3 billion in executed trades across all symbols.

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<sup>13</sup> I also received from the DOJ and reviewed two sets of price and volume data related to select At-Issue Trading Episodes: (i) 101 files from FINRA showing intraday price and volume data over select periods and (ii) 38 Bloomberg data files showing daily price and volume data. See Appendix B, Section 4. These files are not an input to the profit calculation, but I understand I may be asked to present summary exhibits using this data at trial.

<sup>14</sup> The brokerage files contain trading in both equities and options. I do not include options trading in the profit calculation (see n. 10).

4. I took five steps to combine the data across files, which I summarize in detail in

**Appendix Exhibit 1:**

- a) First, I retained only records showing fully or partially filled orders (*i.e.*, I excluded any records showing cancelled, reversed, or expired orders).<sup>15</sup>
- b) Second, I retained the fields needed to calculate profit for the At-Issue Trading Episodes (trade time, side, quantity, price, symbol, and account) and assigned them a common name to facilitate combining files.<sup>16</sup> Because some orders are partially filled, I used fields representing executed quantities, not ordered quantities.
- c) Third, I standardized the trade side field to have two values: “buy” and “sell” trades. Buy trades increase an account’s position in a given symbol, and include such values as “Buy,” “Buy To Close,” and “Buy To Cover.” Sell trades decrease the account’s position, and include such values as “Sell,” “Sell To Close,” and “Sell Short.” This standardization involves making trade side entries consistent across brokerages (*e.g.*, “Buy to Close” to “BUY,” “Sell Short” to “SELL,” etc.).
- d) Fourth, I standardized timestamps to be in US Eastern Time, to the extent they were not already in that format. The DOJ provided me with e-mails from the relevant brokerages describing the native time zone information for each trade file.<sup>17</sup>

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<sup>15</sup> See Column [5] of **Appendix Exhibit 1**.

<sup>16</sup> See Column [6] of **Appendix Exhibit 1**. Excluded fields included information on order type (*i.e.*, limit orders vs. market orders), order duration (*e.g.*, day orders vs. good until cancelled orders), exchange identifiers, and market session identifiers (*i.e.*, extended hours vs. regular hours).

<sup>17</sup> See **Appendix B**, Section 2.D.

- e) Fifth, I identified and dropped any duplicate trades arising from files that cover overlapping time periods for the same account.<sup>18</sup>

5. After combining the trade data, I assigned each trade a “roundtrip” identifier. A roundtrip is a collection of trades within a brokerage account that initiates a new long or short position in a given symbol and subsequently returns the account’s position in that symbol to zero. For example, suppose an account made an initial purchase of 5 units of XYZ stock at 10:00AM, bought 5 more units at 11:00AM, sold 4 units at 11:30AM, and sold the remaining 6 units at 12:00PM. Those four trades would form a single roundtrip.

6. I identified roundtrips by taking the cumulative sum of the number of shares traded over time for a given account holder, symbol, and brokerage account (beginning from a trader’s first trade in a given symbol); every time the cumulative position returns to zero, the subsequent transaction is the start of a new roundtrip.<sup>19</sup>

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<sup>18</sup> Specifically, the Interactive Brokers file “Trade Blotter U3063007.xlsx” contains duplicate copies of some trades in the “Order Tickets 1 - Interactive Brokers.xlsx” and “Order Tickets 2 - Interactive Brokers.xlsx” files. I identify duplicate trades across these files using the execution order ID field (“Exec id”) and retain only a single record corresponding to each executed order. See, e.g., InteractiveBrokers, “Viewing Open Orders,” 2023, available at <https://www.ibkrguides.com/ecam/viewing-open-orders.htm> (noting that “Exec ID” is the “ID assigned to the executed order”).

<sup>19</sup> There are two At-Issue Trading Episodes for which the underlying stock ticker changed before or during the episode.

On November 5, 2021, Mullen Automotive, Inc., entered into a reverse merger transaction with Net Element, Inc. Subsequent to the merger, the company changed its stock ticker from “NETE” to “MULN.” One of the At-Issue Trading Episodes involved trades of MULN stock between November 2, 2021, and November 12, 2021. At the end of the trading day on November 4, 2021, Defendant Constantin had a net long position of 80,601 shares of NETE, and between November 5, 2021, and November 12, 2021, he sold a net of 80,601 shares of MULN. To accurately capture this roundtrip, I included Defendant Constantin’s position in NETE prior to November 5, 2021, when calculating his cumulative position for MULN. See Mullen Automotive Inc., SEC Form 8-K, November 12, 2021, available at [https://www.sec.gov/Archives/edgar/data/1499961/000110465921138173/tm2132610d1\\_8k.htm](https://www.sec.gov/Archives/edgar/data/1499961/000110465921138173/tm2132610d1_8k.htm).

In January of 2021, CarLotz, Inc., completed a de-SPAC merger with Acamar Partners Acquisition Corp. On January 22, 2021, the combined entity’s shares began trading on the Nasdaq Global Market under the ticker “LOTZ.” Acamar Partners’ stock had previously traded on the Nasdaq under the ticker “ACAM.” One of the At-Issue Trading Episodes involved trades of LOTZ stock on June 8, 2021. As with NETE/MULN above, I included traders’ net long or short positions in ACAM at the time of the ticker change so as to accurately identify LOTZ roundtrips that closed out on June 8, 2021. See Exhibit 99.1 to CarLotz, Inc., SEC Form 8-K, January 21, 2021, available at [https://www.sec.gov/Archives/edgar/data/1759008/000110465921006346/tm213854d1\\_ex99-1.htm](https://www.sec.gov/Archives/edgar/data/1759008/000110465921006346/tm213854d1_ex99-1.htm).

7. Within a roundtrip I calculated profit on a first-in-first-out (“FIFO”) basis. In a FIFO profit calculation, shares are valued as if they were sold in the order they are acquired, so when a sale is made the cost of the acquired shares is that of the earliest purchased shares.<sup>20</sup> **Table 1 in Section IV** above provides an example FIFO profit calculation.
8. To calculate profits for the At-Issue Trading Episodes, I first identified every roundtrip that contained at least one trade in the at-issue security during the episode. For these roundtrips, I then calculated the total FIFO profit associated with every trade that took place during the episode and summed these profits together to determine the profit each At-Issue Trader realized during the episode.
9. In total, trades from 6,883 unique roundtrips are included in the profit calculation. More than 99 percent of these roundtrips (6,828 of the 6,883) begin and end during the relevant episode, and so the entirety of the trading in the roundtrip is included in the profit calculation. However, two less common situations occur: some roundtrips begin prior to the start of an episode, and some roundtrips conclude after the end of an episode. For such roundtrips, I include only FIFO profits realized from trades during the At-Issue Trading Episodes. For example:
  - a) Roundtrip Beginning Prior to an Episode (At-Issue Trading Episode covering SXTC between June 18, 2020, and September 4, 2020):
    - i) On May 29, 2020, approximately three weeks prior to the start of the At-Issue Trading Episode, Defendant Knight began buying and selling shares of SXTC. Between May 29, 2020, and June 17, 2020 (the day before the start of the episode), Defendant Knight purchased and sold

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<sup>20</sup> There are 32 roundtrips with trades that contribute to the profit calculation in which an account at some point during the roundtrip has a negative (short) position. The FIFO method works the same for short positions as for long positions, but in the inverse—it matches purchases against the earliest sale that has not already been covered.

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24,130 and 21,900 shares of SXTC, respectively, leaving him with a net long position of 2,230 shares at the start of the episode.

- ii) The profit calculation includes FIFO profit from Defendant Knight's sales during the episode that closed his incoming 2,230 share long position (as well as subsequent purchases and sales during the episode window). The profit calculation does not include any FIFO profit from the 21,900 shares of SXTC that Defendant Knight purchased and sold prior to the start of the episode.

b) Roundtrip Concluding After an Episode (At-Issue Trading Episode covering CYN between October 21, 2021, and October 22, 2021):

- i) On October 22, 2021, during an episode, Defendant Hennessey opened a position in CYN and purchased 20,000 shares. On October 25, 2021, three days after the end of the episode, Defendant Hennessey purchased an additional 30,000 shares of CYN between 9:40:06 AM ET and 10:13:51 AM ET. He subsequently sold his entire 50,000 share position between 12:55:24 PM ET and 12:56:32 PM ET. Because the closing of Defendant Hennessey's position occurred entirely after the end of the At-Issue Trading Episode, the profit calculation does not include any of the \$64,128.19 of profit Defendant Hennessey realized from these trades.<sup>21</sup>

10. Of the 6,883 unique roundtrips that have trades during an At-Issue Trading Episode, 55 (0.8 percent) have at least one trade outside an episode window

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<sup>21</sup> If Defendant Hennessey had sold some of his shares on October 22, 2021, I would have included the profit realized from these share sales in the profit calculation.

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(before or after). The trades of these 55 roundtrips that occur during an At-Issue Trading Episode contribute \$5,365,341.98 to the profit calculation.<sup>22</sup>

## B. Communication Data

### 1. Twitter

11. I received from the DOJ nine Excel files containing records of Defendants' Twitter activity, which are summarized in **Appendix Exhibit 2**. I understand that the Twitter activity for the Defendants, except Defendants Matlock and Rybarczyk, was obtained through a search warrant executed on Twitter, Inc.<sup>23</sup> I further understand that the Twitter activity for Defendants Matlock and Rybarczyk was obtained by an analyst at the Securities and Exchange Commission who in and around March 2022 collected their publicly available tweets.
12. I retain each public tweet<sup>24</sup> and standardize the tweet's timestamp to U.S. Eastern Time. The Twitter files contain a Twitter handle in the file title, which I have mapped to the Defendants based on the indictment.<sup>25</sup> In total there are 170,749 public Twitter posts by the Defendants, of which 136,154 posts occurred during an At-Issue Trading Episode.

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<sup>22</sup> In addition, these 55 roundtrips have \$679,638.76 in FIFO profit from trades outside an At-Issue Trading Episode, which is not included in the profit calculation.

<sup>23</sup> Two files obtained via the search warrant executed on Twitter, Inc. contain limited Twitter activity for Defendants Matlock and Rybarczyk, primarily from late March 2022 and beyond. See Rows [A.7] and [A.8] of **Appendix Exhibit 2** and the associated exhibit notes.

<sup>24</sup> Files [A.1] through [A.8] of **Appendix Exhibit 2** also contain direct messages between the Defendants and other individual accounts, which I do not include in the data files discussed in **Appendix C.C.**

<sup>25</sup> Superseding Indictment, ¶¶ 2-9. The file "Attachment\_F\_priority\_files\_008d.xlsm" does not have a Twitter handle in the file title but lists the relevant Twitter handle in the "username" field.

## *2. Discord and Cell Phone Data*

13. I received from the DOJ a CSV file containing the communication records from the Atlas Trading Discord server (458013311846449152.csv). This Discord file contains over 2 million records from more than 6,000 unique usernames. I flagged posts by the At-Issue Traders based on the “Username” field and the username information contained in the indictment.<sup>26</sup> For the data declaration I retained only posts by the At-Issue Traders, and for each post I retained the timestamp and contents of those posts. The timestamps in the Discord file are stored in Coordinated Universal Time (“UTC”), which I converted to US Eastern Time.<sup>27</sup> In total, there are 184,232 Discord posts by the At-Issue Traders, of which 93,343 occurred during an At-Issue Trading Episode.
14. I then appended the Discord data to the combined Twitter data to create a single Discord and Twitter file.
15. I also received from counsel records of direct messages the At-Issue Traders sent or received from various Discord channels, as well as Cellebrite cell phone records for Defendants Knight and Deel.<sup>28</sup>

## *3. Alleged False Statements*

16. I lastly received from the DOJ a list of 2,048 statements made by Defendants on Twitter or Discord—as well as 111 Discord messages by Francis Sabo—which the DOJ alleges to be false. I identified these statements in the combined Discord and Twitter file based on the timestamp and content of the statements.

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<sup>26</sup> Superseding Indictment, ¶¶ 2-9.

<sup>27</sup> For example, the timestamp for the first entry in the Discord file is ‘2022-03-08 19:45:32.380000+00:00’. The “+00:00” is an offset relative to UTC. Because this offset is zero, the timestamps are stored in UTC. See, e.g., SAS Help Center, “Working with Dates and Times by Using the ISO 8601 Basic and Extended Notations,” February 2023, available at [https://documentation.sas.com/doc/en/pgmsascdc/9.4\\_3.5/leforinforref/p1a0qt18rxydrkn1b0rtdfh2t8zs.htm](https://documentation.sas.com/doc/en/pgmsascdc/9.4_3.5/leforinforref/p1a0qt18rxydrkn1b0rtdfh2t8zs.htm).

<sup>28</sup> See Appendix B, Sections 3.C and 3.E.

### C. Preparation of the Data Files

17. For each At-Issue Trading Episode I have prepared an Excel file containing (i) a table summarizing the Twitter, Discord, and trading activity for each At-Issue Trader during the episode, and (ii) a timeline of each At-Issue Trader's trades and public Twitter and Discord posts during the episode. Each Excel file is titled based on the security and date range applicable to a given At-Issue Trading Episode: for example, "Episode 111 - DATS - August 13, 2021 to October 26, 2021.xlsx" contains information related to the At-Issue Trading Episode covering trading of DATS stock between August 13, 2021, and October 26, 2021.
18. The summary tables for the Excel files were constructed as follows:
  - a) First, I used the combined Twitter and Discord file (see Appendix ¶ 14) to calculate, for each trader, the number of public Twitter posts and Discord messages that (i) were made during the At-Issue Trading Episode and (ii) mentioned the security at-issue in the episode. Because there are over 350,000 Twitter and Discord posts by the At-Issue Traders, I used a computer program to identify posts that mention the at-issue ticker. For example, at 2:51:31 PM ET on September 23, 2021, Defendant Constantin tweeted, "\$DATS I want \$30+ with all the upcoming catalysts." Because this tweet had the string "DATS" in it and occurred between August 13, 2021, and October 26, 2021, it is counted in the summary table for the At-Issue Trading Episode covering trading of DATS between those dates.<sup>29</sup>

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<sup>29</sup> The program considers a Twitter or Discord message to mention a ticker associated with an At-Issue Trading Episode if (i) the ticker string is included in the message (not case sensitive) and (ii) the ticker string is preceded and followed by non-word characters. Non-word characters are characters other than letters, numbers, and the underscore. A single message can potentially refer to zero, one, or more than one ticker.

For example, the message, "\$DATS I want \$30+ with all the upcoming catalysts," flags the ticker "DATS" because the message contains the string "DATS" and "DATS" is preceded by a dollar sign and followed by a space, both of which are non-word characters. The beginning and end of a message are considered non-word characters, so this message would meet the non-word character criteria even if the dollar sign at the beginning were deleted.

b) Second, I calculated the total number of shares each trader bought and sold during the At-Issue Trading Episode and the FIFO profit they realized from these trades.<sup>30</sup>

19. The individual trader timelines for the Excel files were constructed as follows:

- a) First, for a given trader and At-Issue Trading Episode, I identified every trade in the combined trade dataset (see Appendix ¶ 4) that was made by the trader in the at-issue security.
- b) Second, I aggregated these trades by account, trade side, and second to create within-second entries.<sup>31</sup> For example, the TD Ameritrade data records trades at the millisecond level. Between 11:05:48 and 11:05:49 AM ET on August 13, 2021, Defendant Constantin's TD Ameritrade account had 74 unique purchase records for DATS associated with three distinct order IDs. Each order ID was for 10,000 shares of DATS, so in total Defendant Constantin purchased 30,000 shares of DATS in this 1-second window. In the timeline, all 74 of these purchase records were combined into a single entry reflecting Defendant Constantin's purchases of DATS between 11:05:48 and 11:05:49 AM ET. I aggregated sales and purchases separately, without netting them out, so that each second could potentially have up to two entries, one for sales and one for purchases.<sup>32</sup>

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Alternatively, the hypothetical message "I'm holdingdats," with a missing space between "holding" and "dats," would not meet these criteria because the string "DATS" is preceded by a word character (the letter "g").

<sup>30</sup> See Appendix ¶¶ 5-8 for a discussion of how I calculate trading profits.

<sup>31</sup> As shown in **Appendix Exhibit 1**, four Webull files report trading records to the minute (*i.e.*, without specifying the second of the trade). For these files (Webull – 5KV54402 Perry Matlock.csv, Webull – 5KX16182 Gary Deel.csv, Webull – 5MV17047 Tom Cooperman.csv, and Webull – 5WA85933 Edward Constantin.csv), I aggregate trades by account, trade side, and minute.

<sup>32</sup> I also aggregated transactions by the same trader across brokerage accounts separately, so that each second could potentially have multiple entries each corresponding to the purchase or sale of shares in a different brokerage account.

c) Finally, I combined the aggregated trade records with the public Twitter posts and Discord messages that mention the at-issue security during the At-Issue Trading Episode (see Appendix ¶ 18.a). I also added an identifier field that flags whether the DOJ alleges these Twitter posts and Discord messages to be false.

20. Where applicable, the Excel files for the At-Issue Trading Episodes also contain a summary of any open positions in the at-issue security held by At-Issue Traders prior to the start of the episode or at the conclusion of the episode.<sup>33</sup> For positions that existed prior to the start of an episode, the summary tables show the trader's position at the beginning of the episode and any FIFO profits the trader realized while building that position. Likewise, for traders with open positions at the end of an episode, the summary tables show the trader's position at the end of the episode and any FIFO profits the trader realized after the episode from closing that position. Because these FIFO profits were realized outside of the At-Issue Trading Episodes, they are not included in the \$121,474,498.91 profit total reported in ¶ 9.

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<sup>33</sup> I only report positions and FIFO profits for roundtrips that contain at least one trade during the At-Issue Episode (for example, I do not report profits for roundtrips that both opened and closed prior to the start of an episode). There are 55 such roundtrips. See Appendix ¶ 10 and n. 22.

**Appendix Exhibit 1**  
**Summary of Brokerage Data Files and Data Combination**

File Name		Account(s) and Account Holder(s)	Time Period Covered	Native Time Zone Format	Fields Used to Identify Filled Orders	Fields Used for Profit Calculation
[1]	[2]		[3]	[4]	[5]	[6]
<i>Panel A: Etrade</i>						
[A 1]	RYBARCZYK Blotter1.xlsx	45076583 (Rybarczyk)	7/1/2020 - 12/30/2020	US Eastern (time in seconds)	Event Type Definition = "EXECUTED"	Event Timestamp (dts_exec) Security Symbol Desc (symbol) Order_Action_Type (side) Event Quantity (quant) Event Execution Price (price) ADP Account Nbr (acct_id)
[A 2]	RYBARCZYK Blotter 2.xlsx	45076583 (Rybarczyk)	1/4/2021 - 6/29/2021			
[A 3]	RYBARCZYK Blotter 3.xlsx	45076583 (Rybarczyk)	7/1/2021 - 12/30/2021			
[A 4]	RYBARCZYK Blotter 4.xlsx	45076583 (Rybarczyk)	1/3/2022 - 5/26/2022			
[A 5]	blotter 36756133 - Constantin -Etrade.xlsx	36756133 (Constantin)	6/7/2016 - 7/21/2022			
[A 6]	blotter 37481764 - Matlock - Etrade.xlsx	37481764 (Matlock)	10/16/2019 - 12/17/2019			
<i>Panel B: Interactive Brokers</i>						
[B 1]	Order Tickets 2 - Interactive Brokers.xlsx	U3063007 (Hrvatin, Stefan)	6/13/2019 - 12/30/2020	US Eastern (time in microseconds)	Tag = "E"	Time and Milliseconds (combined into dts_exec) Symbol (symbol) Side (side) Size (quant) Price (price) Acct Number (acct_id)
[B 2]	Order Tickets 1 - Interactive Brokers.xlsx	U3063007 (Hrvatin, Stefan)	2/23/2021 - 7/21/2022			
[B 3]	Trade Blotter U3063007.xlsx	U3063007 (Hrvatin, Stefan)	9/5/2019 - 8/4/2022	US Eastern (time in seconds)	Tag = "E"	Trade Date (dts_exec) Symbol (symbol) Side (side) Quantity (quant) Price (price) Account (acct_id)
<i>Panel C: TD Ameritrade</i>						
[C 1]	Plato 03_23_2022 1.xlsx	494758755 (Hennessey, Michael) 497399758 (Rybarczyk, Mariela)	2/20/2019 - 3/16/2023	US Central (time in milliseconds)	action_type = "FILL" or execution_type = "FILL"	actvy_ts (dts_exec) symbol (symbol) side (side) exec_leg_qty (quant) price_amt (price) acct_nbr (acct_id)
[C 2]	TRADE HISTORY REPORT -TD - Hrvatin Stefan and Stephanie.xlsx	495155738 (Hrvatin, Stefan) 865274859 (Hrvatin, Stefan) 686230254 (Hrvatin, Stephanie)	1/2/2019 - 10/17/2021			
[C 3]	report_1 - TD csv	232154067 (Hennessey Capital Management) 491247364 (Hennessey, Mitchell) 491693310 (Rybarczyk) 494158769 (Matlock) 496625310 (Knight) 497695487 (Deel)	1/2/2019 - 5/27/2022			
[C 4]	report_2 - TD csv	497695487 (Deel)	12/11/2020 - 5/16/2022			
[C 5]	report_3 - TD csv	497695487 (Deel) 865819349 (Constantin)	3/6/2019 - 6/30/2022			
[C 6]	report_4 - TD csv	865819349 (Constantin)	12/18/2020 - 8/31/2021			
[C 7]	report_5 - TD csv	232154067 (Hennessey Capital Management) 252939445 (Hennessey, Mitchell) 270979985 (Hennessey, Mitchell) 277487039 (Hennessey, Mitchell) 491247364 (Hennessey, Mitchell) 489686839 (Matlock) 496625310 (Knight) 865819349 (Constantin)	1/2/2019 - 6/30/2022			

**Appendix Exhibit 1**  
**Summary of Brokerage Data Files and Data Combination**

<b>File Name</b> [1]	<b>Account(s) and Account Holder(s)</b> [2]	<b>Time Period Covered</b> [3]	<b>Native Time Zone Format</b> [4]	<b>Fields Used to Identify Filled Orders</b> [5]		<b>Fields Used for Profit Calculation</b> [6]
<i>Panel D: Tradestation</i>						
[D 1] Trade & Order Blotter.xlsx	11013340 (Sabo)	6/21/2019 - 12/12/2022	US Eastern (time in seconds)	STATUS = "FLL" or "FLP"	TIME_EXECUTED (dts_exec) SYMBOL (symbol) SIDE (side) EXEC_QUANTITY (quantity) EXEC_PRICE (price) ACCOUNTID (acct_id)	
[D 2] Trade Blotter - TradeStation - Matlock.xlsx	11015653 (Matlock)	6/28/2019 - 9/4/2019	UTC (time in seconds)			
<i>Panel E: TradeZero</i>						
[E 1] 2TZ07175 Trades.csv	2TZ07175 (Matlock)	5/22/2020 - 10/27/2022	US Eastern (time in milliseconds)	LastQty > 0	FIXTransactDate (dts_exec) Symbol (symbol) Side (side) LastQty (quant) LastPrice (price) Account (acct_id)	
<i>Panel F: Webull</i>						
[F 1] Webull - 5IJ59954 Mitchell Hennessey Time Stamped Orders.xlsx	5IJ59954 (Hennessey, Mitchell)	5/13/2022 - 9/19/2022	US Eastern (time in seconds)	Type = "TRADE"	Trade Time (dts_exec) Sub Type (side) Description is a text variable (parsed to create symbol, quantity, and price) Filenames (parsed to extract acct_id)	
[F 2] Webull - 5KU41041 Stefan Hrvatin Time Stamped Orders.xlsx	5KU41041 (Hrvatin, Stefan)	2/4/2022 - 10/5/2022				
[F 3] Webull - 5NB36671 John Joseph Rybarczyk Time Stamped Orders.xlsx	5NB36671 (Rybarczyk, John)	11/5/2020 - 8/8/2022	US Eastern (time in minutes)	Type = "TRADE"	filled_time (dts_exec) symbol (symbol) side (side) order_qty (quant) order_money (price = order_money / order_qty) broker_account_id (acct_id)	
[F 4] Webull - 5KV54402 Perry Matlock.csv	5KV54402 (Matlock)	4/17/2019 - 10/4/2022				
[F 5] Webull - 5KX16182 Gary Deel.csv	5KX16182 (Deel)	7/22/2019 - 9/28/2022				
[F 6] Webull - 5MV17047 Tom Cooperman.csv	5MV17047 (Cooperman)	8/19/2020 - 10/4/2022				
[F 7] Webull - 5WA85933 Edward Constantin.csv	5WA85933 (Constantin)	12/10/2018 - 10/4/2022				

**Notes**

From the second Sunday in March to the first Sunday in November, the US Eastern time zone is Eastern Daylight Time, which is 4 hours behind Coordinated Universal Time (UTC). During the remainder of the year, US Eastern time zone is Eastern Standard Time, which is 5 hours behind UTC.

From the second Sunday in March to the first Sunday in November, the US Central time zone is Central Daylight Time, which is 5 hours behind Coordinated Universal Time (UTC). During the remainder of the year, US Central time zone is Central Standard Time, which is 6 hours behind UTC.

In files "Order Tickets 1 - Interactive Brokers.xlsx" and "Order Tickets 2 - Interactive Brokers.xlsx," the Milliseconds variable reports to the sixth decimal place which indicates the data is at microsecond granularity.

Files that report time in seconds sometimes include slight deviations of 1-3 microseconds away from a full second. When I calculate time in seconds, to aggregate trades I truncate time to the second (e.g., trades occurring at 5.999997 seconds would be aggregated with trades occurring at 5 seconds rather than 6 seconds). Therefore, for files that report time in seconds, I add 10 microseconds to the time to mitigate these deviations (e.g., I would replace 5.999997 with 6.000007 which would be aggregated with trades at 6 seconds).

**Appendix Exhibit 2**  
**Summary of Twitter Files**

<b>File Name</b>		<b>Time Period Covered</b>			<b>Native Time Zone Format</b>
[1]	[2]	[3]	[4]	[5]	
[A.1] DipDeity.xlsx	Knight	1/1/2020 - 8/25/2022	16,166	UTC	
[A.2] Hugh_Henne.xlsx	Hennessey	1/6/2020 - 8/26/2022	19,960	UTC	
[A.3] LadeBackk.xlsx	Hrvatin	1/1/2020 - 8/26/2022	48,165	UTC	
[A.4] MrZackMorris.xlsx	Constantin	1/1/2020 - 8/26/2022	29,848	UTC	
[A.5] notoriousalerts.xlsx	Deel	1/2/2020 - 8/26/2022	12,193	UTC	
[A.6] ohheytommy.xlsx	Cooperman	2/19/2021 - 8/26/2022	22,085	UTC	
[A.7] PJ_Matlock.xlsx	Matlock	1/28/2020 - 8/26/2022	1,501	UTC	
[A.8] Ultra_Calls.xlsx	Rybarczyk	1/17/2020 - 8/26/2022	822	UTC	
[A.9] Attachment_F_priority_files_008d.xlsm	Matlock, Rybarczyk	2/8/2021 - 3/7/2022 (Matlock) 1/1/2020 - 3/8/2022 (Rybarczyk)	1,257 (Matlock) 18,752 (Rybarczyk)	US Eastern	

**Notes**

For files [A.1] through [A.8], the phrase "Tweets" refers to the Twitter posts included in the "tweets" sheet (as opposed to "direct-messages" or "direct-messages-group").

"PJ\_Matlock.xlsx" contains 10 tweets between January 8, 2020, and May 11, 2022, all of which are retweets.

"Ultra\_Calls.xlsx" contains 52 tweets between January 8, 2020, and March 30, 2022, all of which are retweets.